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# **Policy context**

### Introduction

The State Development Assessment Provisions (SDAP) provide assessment benchmarks for the assessment of development applications where the chief executive is the assessment manager or a referral agency.

The chief executive administering the *Planning Act 2016* through the State Assessment and Referral Agency (SARA) uses the SDAP to deliver a coordinated, whole-of-government approach to the state's assessment of development applications.

# The role of the State Assessment and Referral Agency

Through SARA, the chief executive of the Act (the Director-General of the Department of State Development, Manufacturing, Infrastructure and Planning) is the assessment manager or referral agency for development applications where there is a matter of interest to the state. The Planning Regulation 2017 (the regulation) states when the chief executive is an assessment manager or a referral agency for particular development applications.

DSDMIP is the single point of lodgement for all development applications which are assessed through SARA. In assessing development applications through SARA, DSDMIP will seek technical advice from other relevant state agencies with expertise in the particular matters covered by the SDAP provisions. Following assessment by SARA, a single decision notice (as assessment manager) or referral agency response (as referral agency) is issued which addresses all relevant matters of state interest.

# Relationship with the *Planning Act 2016* and the Planning Regulation 2017

Queensland's planning legislation establishes a performance-based approach to planning. Performance-based planning seeks to regulate development to achieve a performance outcome, rather than regulating development through prescription.

In assessing and deciding a development application, the chief executive is bound by the decision-making rules outlined in the Act, including the matters the chief executive must assess a development application against and the matters the chief executive may have regard to when undertaking the assessment.

Section 43(1) of the Act provides that the assessment manager must assess development against assessment benchmarks. The regulation sets out the specific assessment benchmarks that an assessment manager must assess development against, including the SDAP. Section 45 of the Act sets out the categories of assessment for assessable development (code assessment and impact assessment) and the matters the assessment must, or may be, carried out against. Each of the triggers in schedules 9 and 10 of the regulation specify the assessment benchmarks for that trigger. For every trigger the chief executive is the assessment manager for, the SDAP is specified as the assessment benchmark.

Section 55(2) of the Act states that a regulation may prescribe the matters that a referral agency may, must or must only have regard to in its assessment. Each of the referral triggers in schedules 9 and 10 of the regulation specify the matters the referral agency's assessment must be against. For every trigger the chief executive is the referral agency for, the SDAP is specified as the matter the referral agency's assessment must be against. Additionally, section 23 of the regulation specifies other matters a referral agency must have regard to when assessing a development application.

# Development not assessed by SARA, or not assessed against SDAP

Under schedules 9 and 10 of the regulation, certain matters require referral to entities other than the chief executive. Referrals to entities other than the chief executive are not administered by SARA and do not require assessment against the SDAP. Further information on these referrals is available on DSDMIP's website.

Where referral to the chief executive is triggered in the regulation for the South East Queensland Regional Plan, SARA will assess these applications against the criteria in the regulation. The SDAP does not contain provisions relevant to this trigger.

Where a development application made to the chief executive is triggered in the regulation for material change of use on contaminated land, SARA will assess these applications against the criteria in the regulation. The SDAP does not contain provisions relevant to this trigger.

# Using the state codes

Matters of state interest which are considered by the SDAP may broadly be categorised as:

- 1. interests that have the potential to impact on development (e.g. unexploded ordnance); and
- 2. interests that must be protected from the impacts of development (e.g. marine plants).

Appendix 1 is intended to assist applicants in determining which of the state codes in the SDAP apply to a development application.

Table 1 outlines where the chief executive is the assessment manager for a development application under the provisions of the regulation and the relevant state codes for the type of development.

Table 2 outlines where the chief executive is a referral agency for a development application under the provisions of the regulation and the relevant state codes for the type of development.

Within the above context, the SDAP may include both general provisions applying across all development aspects and types, or specific criteria for particular uses and types of development.

# Use of state codes - applicants

The SDAP is structured in a performance-based code format, whereby applicants can address performance criteria to demonstrate that a development appropriately manages any impacts on a matter of state interest, and/or protects a development from impacts of matters of state interest.

In making a development application to SARA, applicants should respond to each of the relevant provisions of the applicable state codes in the SDAP. This will assist in minimising requests for further information and speed up the assessment process.

## Use of state codes - SARA

SARA delegates will assess a development application against the relevant provisions of the applicable state codes. In assessing development applications, DSDMIP will seek technical advice from other relevant state agencies with expertise in the particular matters covered by the relevant SDAP provisions. DSDMIP officers are responsible for issuing SARA decisions on behalf of the chief executive.

## How the state codes are used in assessment

Each state code in the SDAP will typically contain the following assessment criteria:

- 1. a purpose statement;
- 2. performance outcomes: and
- 3. acceptable outcomes (the only non-essential assessment criteria).

#### In simple terms:

- 1. if a development application complies with all of the relevant performance outcomes of a code, it complies with the purpose statement of the code, and therefore with the code itself
- 2. if a development application complies with some, but not all, relevant performance outcomes of a code, SARA will determine whether it complies with the purpose statement and therefore the code itself
- 3. if SARA determines that the purpose statement of the code is complied with, the code itself is considered to be complied with and an approval (with or without relevant conditions) will be issued
- 4. if a development application does not comply with the purpose statement of the code, it does not comply with the code itself and will be refused.

Each aspect of the state codes, and how they are applied, are discussed in further detail in the following sections.

## **Purpose statement**

The purpose statement of a state code is the highest order test within the SDAP that a development application can be assessed against. Unlike a local government planning scheme, the SDAP does not rely on overarching strategic outcomes. Instead, development will comply with a particular state code if it can be shown to meet the code's purpose statement. The purpose provides the overall context for the code and holistically defines what the code seeks to manage and/or protect.

## **Performance outcomes**

Performance outcomes serve as the primary tests for development being assessed against a code, and identify the aspects or features of a relevant matter of state interest.

Performance outcomes define what may constitute an acceptable or tolerable impact on a matter of state interest, or the minimum standards required to manage the impacts a matter of state interest on a development.

If a development application does not comply with one or more particular performance outcomes then SARA will determine, on balance, whether the purpose statement is complied with or not.

## **Acceptable outcomes**

Acceptable outcomes are provided for some, but not all, performance outcomes, and identify ways in which performance outcomes can be met. An application that complies with all applicable acceptable outcomes is considered to satisfy the corresponding performance outcome. If an application does not comply with one or more of the applicable acceptable outcomes, compliance with the performance outcome should be demonstrated.

Where multiple acceptable outcomes are provided as a means of achieving compliance with a performance outcome, they are to be read in the following way:

- 1. if there is an 'AND' provided between each acceptable outcome, this means all of the acceptable outcomes apply if they are relevant to the application
- 2. if there is an 'OR' between each acceptable outcome and there are only two acceptable outcomes, this means one or the other apply if they are relevant to the application
- 3. if there are three or more acceptable outcomes provided and there is an 'AND' provided between the first two or more acceptable outcomes, then an 'OR' provided between the last two acceptable outcomes, this means that all of the acceptable outcomes apply and one-or-the-other of the last two acceptable outcomes apply (for example, the code lists AO7.1 AND AO7.2 AND AO7.3 OR AO7.4 this means either AO7.1, AO7.2 and AO7.3 apply, or AO7.1, AO7.2 and AO7.4 apply)
- 4. if there are three or more acceptable outcomes provided and the words 'OR all of the following acceptable outcomes apply' or 'OR both of the following acceptable outcomes apply'; this means that either the first acceptable outcome applies, or all other acceptable outcomes apply (for example, the code lists AO2.1, OR both of the following acceptable outcomes apply, AO2.2 AND AO2.3 this means either AO2.1 applies, or AO2.2 and AO2.3 apply).

The codes can also contain reference tables or figures (information required to apply the code).

# Managing multiple state codes or matters of state interest

Development applications assessed against the SDAP will sometimes involve multiple matters of state interest and trigger assessment against a number of different state codes. Where this occurs, applicants should consider and address each relevant state code independently. It is not necessary to attempt to balance or justify outcomes with reference to other state codes.

In assessing the development application, SARA officers will consider the compliance or otherwise of the application with each applicable state code. In cases where multiple state codes are triggered and the

purpose statement of one or more of the codes is not considered to be achieved by the development proposal, SARA will make a decision that best achieves and advances the purpose of the Act.

# Interpretation

## Statutory and non-statutory parts of the SDAP

All information in a state code is statutory, other than notes (except where indicated to be statutory notes) and the list of reference documents, which are intended to assist applicants in preparing a development application. Each code contains the following information:

- 1. purpose statement
- 2. performance outcomes and acceptable outcomes
- 3. reference documents which may support the interpretation and assessment of a development application against a particular matter.
- 4. figures and/or reference tables (where applicable) which outline information required to apply the code
- 5. glossary of terms
- 6. abbreviations (where applicable) specific to that state code.

All information included in the sections of the SDAP titled 'Policy context', 'Using the state codes' and 'Interpretation', as well as the appendices, form non-statutory components of the document.

## Numbered and bulleted lists

Numbered and bulleted lists throughout this document are to be interpreted as 'and' statements unless the word 'or' is included.

## Notes and statutory notes

Statutory notes are identified by the title 'statutory note:' and constitute statutory information. Notes are identified by the title 'note', are extrinsic material, meaning they are non-statutory.

## **Glossary of terms**

A glossary is included within each state code which defines terms as they relate to that individual state code. All defined terms within the state code are bold for ease of reference. When a term is not defined it has the meaning given in the Act or the regulation or where not defined in one of those documents, its ordinary meaning.

## **Hyperlinks**

Where a hyperlink is available, the text appears in the following style: hyperlink.

## Mapping

Where relevant, reference may be made to the development assessment (DA) mapping system (as amended from time to time) <a href="https://planning.dilgp.qld.gov.au/maps">https://planning.dilgp.qld.gov.au/maps</a>, which contains mapping layers relevant to SARA. The DA mapping system is publicly available.

The DA mapping system aims to provide a central repository for all available mapping layers that may assist users in identifying relevant assessment or referral triggers under the regulation and/or responding to provisions contained within the SDAP. The DA mapping system also contains information in relation to other state government planning mechanisms not related to SARA.

# **Appendices**

# Appendix 1: Development requiring assessment under the regulation

Appendix 1 is intended to assist applicants in determining which of the state codes apply to a development application.

Table 1 outlines where the chief executive is the assessment manager for a development application under the provisions of the regulation and the relevant state codes for the type of development.

Table 2 outlines where the chief executive is a referral agency for a development application under the provisions of the regulation and the relevant state codes for the type of development.

## Appendix 2: FastTrack5 framework

Where the chief executive is the assessment manager or referral agency for a development application, aspects of that application may qualify for a streamlined assessment. The FastTrack5 framework is a referral and assessment process that allows certain aspects of development to be assessed and decided quickly by SARA. A reduced fee applies to eligible aspects of development.

### Qualifying for FastTrack5 assessment

Having confirmed the triggers relevant to a development application, applicants can use the tables in appendix 1 of the SDAP to determine whether the FastTrack5 assessment pathway is available prior to lodgement or referral of the application to SARA. It is up to the applicant as to whether they seek to qualify for FastTrack5 assessment for any or all of the eligible aspects of development.

To qualify for FastTrack5 assessment, development applications must demonstrate that all of the qualifying criteria in appendix 2 for each relevant aspect of development are met. The reduced SARA development application fee will be applied for each qualifying FastTrack5 trigger at the time of lodgement or referral of the application. If the application does not meet all of the relevant FastTrack5 qualifying criteria, the standard SARA assessment pathway applies, requiring full assessment against the SDAP state codes and subject to standard statutory timeframes and fees.

Upon receipt of an application seeking assessment via the FastTrack5 pathway, SARA will review the documentation provided and confirm that a triggered aspect of development qualifies for FastTrack5 assessment.

If after lodgement or referral an aspect of the development application is proven not to meet the relevant FastTrack5 qualifying criteria, the applicant will be asked to provide a supplementary fee to ensure that the application is properly made or properly referred to SARA for the relevant trigger(s) in accordance with the regulation. The application will then follow the standard SARA assessment pathway and the usual statutory timeframes, as per the Act and the Development Assessment Rules.

## Assessment via the FastTrack5 assessment pathway

Having confirmed that the relevant aspect(s) of the development meet the FastTrack5 qualifying criteria, SARA can quickly assess and provide a referral response or decision for a FastTrack5 eligible aspect of the development. Applications that qualify for FastTrack5 assessment will not be subject to an information request and standard conditions will generally be applied.

# Assessment of FastTrack5 triggers via the standard assessment pathway

In circumstances where an application has more than one SARA trigger, but not all triggers are FastTrack5 eligible triggers or aspects of development, the application will follow the standard SARA assessment pathway and be subject to the associated timeframes. Nevertheless, FastTrack5 eligible aspects of development will still benefit from a reduced fee, will not be subject to an information request and will generally have standard conditions applied. For applications assessed through the standard assessment pathway which also have FastTrack5 eligible triggers, a single decision notice will be issued covering all aspects of development.

# State code 1: Development in a state-controlled road environment

## 1.1 Purpose statement

The purpose of this code is to protect **state-controlled roads**, **future state-controlled roads** and other infrastructure in **state-controlled roads** from adverse impacts of development. The purpose of this code is also to protect the safety of people using, and living and working near, **state-controlled roads**.

Specifically, this code seeks to ensure:

- 1. development does not create a safety hazard for users of a **state-controlled road**, by increasing the likelihood or frequency of fatality or serious injury
- 2. development does not compromise the structural integrity of **state-controlled roads**, **road transport infrastructure** or **road works**
- 3. development does not result in a worsening of the physical condition or operating performance of **state-controlled roads** and the surrounding road network
- development does not compromise the state's ability to construct state-controlled roads and future state-controlled roads, or significantly increase the cost to construct state-controlled roads and future state-controlled roads
- 5. development does not compromise the state's ability to maintain and operate **state-controlled roads**, or significantly increase the cost to maintain and operate **state-controlled roads**
- 6. development does not compromise the structural integrity of **public passenger transport infrastructure** located on **state-controlled roads** or compromise the operating performance of public passenger transport services on **state-controlled roads**
- 7. the community is protected from significant adverse impacts resulting from environmental emissions generated by vehicles using **state-controlled roads**.

# 1.2 Performance outcomes and acceptable outcomes

Table 1.2.1: Development in a state-controlled road environment

Performance outcomes	Acceptable outcomes
Buildings and structures	
PO1 The location of buildings, structures, infrastructure, services and utilities does not create a safety hazard in a state-controlled road, or cause damage to, or obstruct road transport infrastructure.	AO1.1 Buildings, structures, infrastructure, services and utilities are not located in a state-controlled road.  AND
	<b>AO1.2</b> Buildings, <b>structures</b> , infrastructure, services and utilities can be maintained without requiring access to a <b>state-controlled road</b> .
<b>PO2</b> The design and construction of buildings and <b>structures</b> does not create a safety hazard by distracting users of a <b>state-controlled road</b> .	AO2.1 Facades of buildings and structures facing a state-controlled road are made of non-reflective materials.
	OR
	AO2.2 Facades of buildings and structures do not reflect point light sources into the face of oncoming traffic on a state-controlled road.  AND

	A (-11 (
Performance outcomes	Acceptable outcomes
	AO2.3 External lighting of buildings and structures is not directed into the face of oncoming traffic on a state-controlled road and does not involve flashing or laser lights.
	AND
	AO2.4 Advertising devices visible from a state- controlled road are located and designed in accordance with the Roadside Advertising Guide, Department of Transport and Main Roads, 2013.
<b>PO3</b> Road, pedestrian and bikeway bridges over a state-controlled road are designed and constructed to prevent projectiles from being thrown onto a state-controlled road.	AO3.1 Road, pedestrian and bikeway bridges over a state-controlled road include throw protection screens in accordance with section 4.9.3 of the Design Criteria for Bridges and Other Structures Manual, Department of Transport and Main Roads, 2014.
Filling, excavation and retaining structures	
<b>PO4</b> Filling and excavation does not interfere with, or result in damage to, infrastructure or services in a <b>state-controlled road</b> .	No acceptable outcome is prescribed.
Note: Information on the location of services and public utility plants in a <b>state-controlled road</b> can be obtained from the Dial Before You Dig service.	
Where development will impact on an existing or future service or public utility plant in a <b>state-controlled road</b> such that the service or public utility plant will need to be relocated, the alternative alignment must comply with the standards and design specifications of the relevant service or public utility provider, and any costs of relocation are to be borne by the developer.	
Refer to the SDAP Supporting Information: Filling, excavation and retaining structures in a state-controlled road environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.	
<b>PO5</b> Filling, excavation, building foundations and retaining structures do not undermine, or cause subsidence of, a state-controlled road.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended an RPEQ certified geotechnical assessment, prepared in accordance with the Road Planning and Design Manual 2 <sup>nd</sup> Edition: Volume 3, Department of Transport and Main Roads, 2016, is provided.	
Refer to the SDAP Supporting Information: Filling, excavation and retaining structures in a state-controlled road environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome and prepare a geotechnical assessment.	
PO6 Filling, excavation, building foundations and retaining structures do not cause ground water disturbance in a state-controlled road.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended an RPEQ certified geotechnical assessment, prepared in accordance with the Road Planning and Design manual 2 <sup>nd</sup> Edition: Volume 3, Department of Transport and Main Roads, 2016, is provided.	
Refer to the SDAP Supporting Information: Filling, excavation and retaining structures in a state-controlled road environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome and prepare a geotechnical assessment.	

Porformance outcomes	Accentable cutoemes
PO7 Excavation boring piling blasting or fill	Acceptable outcomes  No acceptable outcome is prescribed
<b>PO7</b> Excavation, boring, piling, blasting or fill compaction during construction of a development	No acceptable outcome is prescribed.
does not result in ground movement or vibration impacts that would cause damage or nuisance to a	
state-controlled road, road transport	
infrastructure or road works.	
Note: To demonstrate compliance with this performance outcome,	
it is recommended an RPEQ certified geotechnical assessment,	
prepared in accordance with Road Planning and Design Manual	
2 <sup>nd</sup> Edition: Volume 3, Department of Transport and Main Roads,	
2016, is provided.	
Refer to the SDAP Supporting Information: Filling, excavation and	
retaining structures in a state-controlled road environment,	
Department of Transport and Main Roads, 2017, for further	
guidance on how to comply with this performance outcome and	
prepare a geotechnical assessment.	A00 4 Fill of the state Locate Salary Location Salary
PO8 Development involving the haulage of fill,	AO8.1 Fill, extracted material and spoil material is
extracted material or excavated spoil material	not transported to or from the development site on a
exceeding 10,000 tonnes per year does not damage	state-controlled road.
the pavement of a <b>state-controlled road</b> .	
Note: It is recommended a pavement impact assessment is	
provided.	
Refer to the SDAP Supporting Information: Filling, excavation and	
retaining structures in a state-controlled road environment, Department of Transport and Main Roads, 2017, and the Guide to	
Traffic Impact Assessment, Department of Transport and Main	
Roads, 2017, for further guidance on how to comply with this	
performance outcome and prepare a pavement impact	
assessment.	No acceptable outcome is proporited
PO9 Filling and excavation associated with the	No acceptable outcome is prescribed.
construction of vehicular access to a development	
does not compromise the operation or capacity of	
existing drainage infrastructure for a <b>state- controlled road</b> .	
Controlled road.	
Note: Refer to the SDAP Supporting Information: Filling,	
excavation and retaining structures in a state-controlled road	
environment, Department of Transport and Main Roads, 2017, for	
further guidance on how to comply with this performance	
PO10 Fill material used on a development site does	AO10.1 Fill material is free of contaminants
not result in contamination of a <b>state-controlled</b>	including acid sulfate content.
road.	morading acid sunate content.
1000.	Note: Soils and rocks should be tested in accordance with AS
Note: Refer to the SDAP Supporting Information: Filling,	1289.0 – Methods of testing soils for engineering purposes and
excavation and retaining structures in a state-controlled road	AS 4133.0-2005 – Methods of testing rocks for engineering
environment, Department of Transport and Main Roads, 2017, for	purposes.
further guidance on how to comply with this performance	AND
outcome.	AND
	AO10.2 Compaction of fill is carried out in
	accordance with the requirements of AS 1289.0
	2000 – Methods of testing soils for engineering
	purposes.
PO11 Filling and excavation does not cause wind-	AO11.1 Compaction of fill is carried out in
blown dust nuisance in a <b>state-controlled road</b> .	accordance with the requirements of AS 1289.0
biowit dust huisance in a state-controlled road.	2000 – Methods of testing soils for engineering
Note: Refer to the SDAP Supporting Information: Filling,	
excavation and retaining structures in a state-controlled road	purposes.
environment, Department of Transport and Main Roads, 2017, for	AND
further guidance on how to comply with this performance	AND
outcome.	

Performance outcomes	Acceptable outcomes
T CHOMICING OUTCOMES	AO11.2 Dust suppression measures are used during
	filling and excavation activities such as wind breaks
	or barriers and dampening of ground surfaces.
Stormwater and drainage	
PO12 Development does not result in an actionable	No acceptable outcome is prescribed.
nuisance, or worsening of, stormwater, flooding or	
drainage impacts in a <b>state-controlled road</b> .	
Note: Refer to the SDAP Supporting Information: Stormwater and drainage in a state-controlled road environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.	
<b>PO13</b> Run-off from the development site is not unlawfully discharged to a <b>state-controlled road</b> .	AO13.1 Development does not create any new points of discharge to a state-controlled road.
Note: Refer to the SDAP Supporting Information: Stormwater and drainage in a state-controlled road environment, Department of	AND
Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.	AO13.2 Stormwater run-off is discharged to a lawful point of discharge.
	Note: Section 3.4 of the Queensland Urban Drainage Manual, Department of Energy and Water Supply, 2013, provides further information on <b>lawful points of discharge</b> .
	AND
	AO13.3 Development does not worsen the condition of an existing lawful point of discharge to the state-controlled road.
PO14 Run-off from the development site during	AO14.1 Run-off from the development site during
construction does not cause siltation of stormwater	construction is not discharged to stormwater
infrastructure affecting a state-controlled road.	infrastructure for a <b>state-controlled road</b> .
Note: Refer to the SDAP Supporting Information: Stormwater and drainage in a state-controlled road environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.	
Vehicular access to a state-controlled road	
PO15 Vehicular access to a state-controlled road	AO15.1 Development does not require new or
that is a <b>limited access road</b> is consistent with government policy for the management of <b>limited</b>	changed access to a limited access road.
access roads.	Note: <b>Limited access roads</b> are declared by the transport chief executive under section 54 of the <i>Transport Infrastructure</i>
Note: Refer to the SDAP Supporting Information: Vehicular	Act 1994 and are identified in the DA mapping system.
access to a state-controlled road, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.	OR
	AO15.2 A new or changed access to a limited access road is consistent with the limited access policy for the state-controlled road.
	Note: <b>Limited access policies</b> for <b>limited access roads</b> declared under the <i>Transport Infrastructure Act 1994</i> can be obtained by contacting the relevant Department of Transport and Main Roads regional office.
	AND
	AO15.3 Where a new or changed access is for a service centre, access is consistent with the Service centre policy, Department of Transport and Main Roads, 2013 and the Access policy for roadside service centre facilities on limited access roads,

# Performance outcomes

#### Acceptable outcomes

Department of Transport and Main Roads, 2013, and the Service centre strategy for the statecontrolled road.

Note: The Service centre policy, Department of Transport and Main Roads, 2013, Access policy for roadside service centre facilities, Department of Transport and Main Roads, 2013 and the relevant Service centre strategy for a state-controlled road can be accessed by contacting the relevant Department of Transport and Main Roads regional office.

PO16 The location and design of vehicular access to a state-controlled road (including access to a limited access road) does not create a safety hazard for users of a state-controlled road or result in a worsening of operating conditions on a statecontrolled road.

AO16.1 Vehicular access is provided from a local road.

OR all of the following acceptable outcomes apply:

Note: Where a **new or changed access** between the premises and a state-controlled road is proposed, the Department of Transport and Main Roads will need to assess the proposal to determine if the vehicular access for the development is safe. An assessment can be made by Department of Transport and Main Roads as part of the development assessment process and a decision under section 62 of Transport Infrastructure Act 1994 issued.

AO16.2 Vehicular access for the development is consistent with the function and design of the statecontrolled road.

Refer to the SDAP Supporting Information: Vehicular access to a state-controlled road, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.

#### AND

AO16.3 Development does not require new or changed access between the premises and the state-controlled road.

Note: A decision under section 62 of the Transport Infrastructure Act 1994 outlines the approved conditions for use of an existing vehicular access to a state-controlled road. Current section 62 decisions can be obtained from the relevant Department of Transport and Main Roads regional office.

#### **AND**

AO16.4 Use of any existing vehicular access to the development is consistent with a decision under section 62 of the Transport Infrastructure Act 1994.

Note: The development which is the subject of the application must be of an equivalent use and intensity for which the section 62 approval was issued and the section 62 approval must have been granted no more than 5 years prior to the lodgement of the application.

#### AND

AO16.5 On-site vehicle circulation is designed to give priority to entering vehicles at all times so vehicles do not queue in a road intersection or on the state-controlled road.

#### Vehicular access to local roads within 100 metres of an intersection with a state-controlled road

PO17 The location and design of vehicular access to a local road within 100 metres of an intersection with a state-controlled road does not create a safety hazard for users of a state-controlled road.

AO17.1 Vehicular access is located as far as possible from the state-controlled road intersection.

Note: Refer to the SDAP Supporting Information: Vehicular access to a state-controlled road, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.

### AND

AO17.2 Vehicular access is in accordance with parts, 3, 4 and 4A of the Road Planning and Design Manual, 2<sup>nd</sup> Edition: Volume 3, Department of Transport and Main Roads, 2016.

AND

Performance outcomes	Acceptable outcomes
	AO17.3 On-site vehicle circulation is designed to give priority to entering vehicles at all times so vehicles do not queue in the intersection or on the state-controlled road.
Public passenger transport infrastructure on state	-controlled roads
PO18 Development does not damage or interfere with public passenger transport infrastructure, public passenger services or pedestrian or cycle access to public passenger transport infrastructure and public passenger services.  Note: Refer to the SDAP Supporting Information: Vehicular access to a state-controlled road, Department of Transport and	AO18.1 Vehicular access and associated road access works are not located within 5 metres of existing public passenger transport infrastructure.  AND  AO18.2 Development does not necessitate the
Main Roads, 2017, for further guidance on how to comply with this performance outcome.	relocation of existing public passenger transport infrastructure.
	AND
	AO18.3 On-site vehicle circulation is designed to give priority to entering vehicles at all times so vehicles using a vehicular access do not obstruct public passenger transport infrastructure and public passenger services or obstruct pedestrian or cycle access to public passenger transport infrastructure and public passenger services.
	AND
	AO18.4 The normal operation of public passenger transport infrastructure or public passenger services is not interrupted during construction of the development.
Planned upgrades	
PO19 Development does not impede delivery of planned upgrades of state-controlled roads.	AO19.1 Development is not located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a state-controlled road.
	Note: Land required for the <b>planned upgrade</b> of a <b>state-controlled road</b> is identified in the <b>DA mapping system</b> .
	OR
	AO19.2 Development is sited and designed so that permanent buildings, structures, infrastructure, services or utilities are not located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a statecontrolled road.
	OR all of the following acceptable outcomes apply:
	AO19.3 Structures and infrastructure located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a state-controlled road are able to be readily relocated or removed without materially affecting the viability or functionality of the development.

Performance outcomes	Acceptable outcomes
	AND
	AO19.4 Vehicular access for the development is consistent with the function and design of the planned upgrade of the state-controlled road.
	AND
	AO19.5 Development does not involve filling and excavation of, or material changes to, land required for a planned upgrade to a state-controlled road.
	AND
	AO19.6 Land is able to be reinstated to the predevelopment condition at the completion of the use.
Network impacts	
<b>PO20</b> Development does not result in a worsening of operating conditions on the <b>state-controlled road</b> network.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended that an RPEQ certified traffic impact assessment is provided. Please refer to the Guide to Traffic Impact Assessment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.	
PO21 Development does not impose traffic loadings on a state-controlled road which could be accommodated on the local road network.	AO21.1 The layout and design of the development directs traffic generated by the development to the local road network.
PO22 Upgrade works on, or associated with, a state-controlled road are built in accordance with Queensland road design standards.	AO22.1 Upgrade works required as a result of the development are designed and constructed in accordance with the <i>Road Planning and Design Manual</i> , 2 <sup>nd</sup> edition, Department of Transport and Main Roads, 2016.
	Note: <b>Road works</b> in a <b>state-controlled road</b> require approval under section 33 of the <i>Transport Infrastructure Act 1994</i> before the works commence.

#### **Table 1.2.2: Environmental emissions**

Statutory note: Where a **state-controlled road** is co-located in the same transport corridor as a railway, the development should instead comply with table 2.2.2: Environmental emissions in State code 2: Development in a railway environment.

Refer to the SDAP Supporting Information: Environmental emissions in a state-controlled road environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with the performance outcomes in Table 1.2.2.

Performance outcomes	Acceptable outcomes
Noise	
Accommodation activities	
PO23 Development involving an accommodation activity or land for a future accommodation activity minimises noise intrusion from a state-controlled road or type 1 multi-modal corridor in habitable rooms.	<ul> <li>AO23.1 A noise barrier or earth mound is provided which is designed, sited and constructed:</li> <li>1. to meet the following external noise criteria at all facades of the building envelope: <ul> <li>a. ≤60 dB(A) L<sub>10</sub> (18 hour) façade corrected (measured L<sub>90</sub> (8 hour) free field between 10pm and 6am ≤40 dB(A))</li> <li>b. ≤63 dB(A) L<sub>10</sub> (18 hour) façade corrected (measured L<sub>90</sub> (8 hour) free field between 10pm and 6am &gt;40 dB(A))</li> </ul> </li> <li>2. in accordance with chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road</li> </ul>

Porformance outcomes	Acceptable outcomes
Performance outcomes	Traffic Noise), Department of Transport and Main
	Roads, 2013.
	Note: To demonstrate compliance with the acceptable outcome, it is
	recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the SDAP Supporting Information: Environmental emissions in a state-controlled road environment, Department of Transport and Main Roads, 2017.
	If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used.
	In some instances, the design of noise barriers and mounds to achieve the noise criteria above the ground floor may not be reasonable or practicable. In these instances, any relaxation of the criteria is at the discretion of the Department of Transport and Main Roads.
	OR all of the following acceptable outcomes apply:
	AO23.2 Buildings which include a habitable room are setback the maximum distance possible from a state-controlled road or type 1 multi-modal corridor.
	AND
	AO23.3 Buildings are designed and oriented so that habitable rooms are located furthest from a state-controlled road or type 1 multi-modal corridor.
	AND
	AO23.4 Buildings (other than a relevant residential building or relocated building) are designed and constructed using materials which ensure that habitable rooms meet the following internal noise criteria:
	≤35 dB(A) L <sub>eq</sub> (1 hour) (maximum hour over 24 hours).
	Note: Noise levels from a <b>state-controlled road</b> or <b>type 1 multi-modal corridor</b> are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise.
	To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the SDAP Supporting Information: Environmental emissions in a state controlled road environment, Department of Transport and Main Roads 2017.
	Habitable rooms of relevant residential buildings located within a transport noise corridor must comply with the Queensland Development Code MP4.4 Buildings in a transport noise corridor, Queensland Government, 2015. Transport noise corridors are mapped on the State Planning Policy interactive mapping system.
PO24 Development involving an accommodation activity or land for a future accommodation activity minimises noise intrusion from a state-controlled road or type 1 multi-modal corridor in outdoor spaces for passive recreation.	<ul> <li>AO24.1 A noise barrier or earth mound is provided which is designed, sited and constructed:</li> <li>1. to meet the following external noise criteria in outdoor spaces for passive recreation:</li> <li>a. ≤57 dB(A) L<sub>10</sub> (18 hour) free field (measured L<sub>90</sub> (18 hour) free field between 6am and 12</li> </ul>
	midnight ≤45 dB(A))

### Performance outcomes Acceptable outcomes b. ≤60 dB(A) L<sub>10</sub> (18 hour) free field (measured L<sub>90</sub> (18 hour) free field between 6am and 12 midnight >45 dB(A)) 2. in accordance with chapter 7 integrated noise barrier design of the Transport Noise Management Code of Practice - Volume 1 Road Traffic Noise, Department of Transport and Main Roads, 2013. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the SDAP Supporting Information: Environmental emissions in a state controlled road environment, Department of Transport and Main Roads 2017 OR AO24.2 Each dwelling has access to an outdoor space for passive recreation which is shielded from a state-controlled road or type 1 multi-modal corridor by a building, solid gap-free fence, or other solid gap-free structure. AND AO24.3 Each dwelling with a balcony directly exposed to noise from a state-controlled road or type 1 multi-modal corridor has a continuous solid gap-free balustrade (other than gaps required for drainage purposes to comply with the Building Code of

Australia).

#### Childcare centres and educational establishments

PO25 Development involving a:

- 1. childcare centre; or
- 2. **educational establishment** minimises noise intrusion from a state-controlled road or type 1 multi-modal corridor in indoor education areas and indoor play areas.

**AO25.1** A noise barrier or earth mound is provided which is designed, sited and constructed:

- to meet the following external noise criteria at all facades of the building envelope:
  - a. ≤58 dB(A) L<sub>10</sub> (1 hour) façade corrected (maximum hour during normal opening hours)
- in accordance with chapter 7 Integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013.

Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the SDAP Supporting Information: Environmental emissions in a state controlled road environment, Department of Transport and Main Roads 2017.

If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used.

OR all of the following acceptable outcomes apply:

AO25.2 Buildings which include indoor education areas and indoor play areas are setback the maximum distance possible from a state-controlled road or type 1 multi-modal corridor.

AND

#### Acceptable outcomes Performance outcomes AO25.3 Buildings are designed and oriented so that indoor education areas and indoor play areas are located furthest from the state-controlled road or type 1 multi-modal corridor. AND AO25.4 Buildings are designed and constructed using materials which ensure indoor education areas and indoor play areas meet the following internal noise criteria: 1. ≤35 dB(A) L<sub>eq</sub> (1 hour) (maximum hour during opening hours). Note: Noise levels from a state-controlled road or type 1 multimodal corridor are to be measured in accordance with AS1055.1-1997 Acoustics - Description and measurement of environmental noise. To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the SDAP Supporting Information: Environmental emissions in a state controlled road environment, Department of Transport and Main Roads 2017. PO26 Development involving a: AO26.1 A noise barrier or earth mound is provided 1. childcare centre; or which is designed, sited and constructed: 2. educational establishment 1. to meet the following external noise criteria in minimises noise intrusion from a state-controlled each outdoor education area or outdoor play road or type 1 multi-modal corridor in outdoor education areas and outdoor play areas. a. ≤63 dB(A) L<sub>10</sub> (12 hour) free field (between 6am and 6pm) 2. in accordance with chapter 7 - Integrated noise barrier design of the Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise), Department of Transport and Main Roads, 2013. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with the SDAP Supporting Information: Environmental emissions in a state controlled road environment, Department of Transport and Main Roads 2017. OR AO26.2 Each outdoor education area and outdoor play area is shielded from noise generated from a state-controlled road or type 1 multi-modal corridor by a building, solid gap-free fence, or other solid gap-free structure. Hospitals AO27.1 Hospitals are designed and constructed PO27 Development involving a hospital minimises noise intrusion from a state-controlled road or type using materials which ensure patient care areas 1 multi-modal corridor in patient care areas. meet the following internal noise criteria: ≤35 dB(A) L<sub>eq</sub> (1 hour) (maximum hour during opening hours). Note: Noise levels from a state-controlled road or type 1 multimodal corridor are to be measured in accordance with AS1055.1-1997 Acoustics - Description and measurement of environmental noise. To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is

provided, prepared in accordance with the SDAP Supporting

Performance outcomes	Acceptable outcomes
	Information: Environmental emissions in a state controlled road environment, Department of Transport and Main Roads 2017.
Vibration	
Hospitals	
PO28 Development involving a hospital minimises vibration impacts from vehicles using a state-controlled road or type 1 multi-modal corridor in patient care areas.	<b>AO28.1 Hospitals</b> are designed and constructed to ensure vibration in the treatment area of a <b>patient care area</b> does not exceed a vibration dose value of 0.1m/s <sup>1.75</sup> .
	AND
	<b>AO28.2 Hospitals</b> are designed and constructed to ensure vibration in the ward area of a <b>patient care area</b> does not exceed a vibration dose value of 0.4m/s <sup>1.75</sup> .
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified vibration assessment report is provided.
Air and light	
PO29 Development involving an accommodation activity minimises air quality impacts from a state-controlled road or type 1 multi-modal corridor in outdoor spaces for passive recreation.	AO29.1 Each dwelling has access to an outdoor space for passive recreation which is shielded from a state-controlled road or type 1 multi-modal corridor by a building, solid gap-free fence, or other solid gap-free structure.
PO30 Development involving a: 1. childcare centre; or 2. educational establishment minimises air quality impacts from a state-controlled road or type 1 multi-modal corridor in outdoor education areas and outdoor play areas.	AO30.1 Each outdoor education area and outdoor play area is shielded from a state-controlled road or type 1 multi-modal corridor by a building, solid gapfree fence, or other solid gap-free structure.
PO31 Development involving an accommodation activity or hospital minimises lighting impacts from a state-controlled road or type 1 multi-modal corridor.	AO31.1 Buildings for an accommodation activity or hospital are designed to minimise the number of windows or transparent/translucent panels facing a state-controlled road or type 1 multi-modal corridor.
	OR
	AO31.2 Windows facing a state-controlled road or type 1 multi-modal corridor include treatments to block light from a state-controlled road or type 1 multi-modal corridor.

Table 1.2.3: Development in a future state-controlled road environment

Performance outcomes	Acceptable outcomes
PO32 Development does not impede delivery of a future state-controlled road.	AO32.1 Development is not located in a future state-controlled road.
	OR
	AO32.2 Development is sited and designed so that permanent buildings, structures, infrastructure, services or utilities are not located in a future statecontrolled road.
	OR all of the following acceptable outcomes apply:
	AO32.3 Structures and infrastructure located in a future state-controlled road are able to be readily

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Performance outcomes	Acceptable outcomes
	relocated or removed without materially affecting the viability or functionality of the development.
	AND
	AO32.4 Development does not involve filling and
	excavation of, or material changes to, a <b>future</b> state-controlled road.
	AND
	AO32.5 Land is able to be reinstated to the pre- development condition at the completion of the use.
PO33 Vehicular access to a future state-controlled	AO33.1 Development does not require new or
road is located and designed to not create a safety hazard for users of a future state-controlled road	changed access between the premises and a future state-controlled road.
or result in a worsening of operating conditions on a future state-controlled road.	AND
Note: Where a <b>new or changed access</b> between the premises	AO33.2 Vehicular access for the development is
and a <b>future state-controlled road</b> is proposed, the Department of Transport and Main Roads will need to assess the proposal to determine if the vehicular access for the development is safe. An assessment can be made by Department of Transport and Main Roads as part of the development assessment process and a decision under section 62 of <i>Transport Infrastructure Act 1994</i> issued.	consistent with the function and design of the <b>future</b> state-controlled road.
PO34 Filling, excavation, building foundations and	No acceptable outcome is prescribed.
retaining structures do not undermine, or cause subsidence of, a future state-controlled road.	
Note: To demonstrate compliance with this performance outcome, it is recommended that an RPEQ certified geotechnical assessment is provided, prepared in accordance with the Road Planning and Design Manual, 2 <sup>nd</sup> edition: Volume 3, Department of Transport and Main Roads, 2016.	
Refer to the SDAP Supporting Information: Filling, excavation and retaining structures in a state-controlled road environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome and prepare a geotechnical assessment.	
PO35 Fill material from a development site does not	AO35.1 Fill material is free of contaminants
result in contamination of land for a <b>future state- controlled road</b> .	including acid sulfate content.
Note: Refer to the SDAP Supporting Information: Filling, excavation and retaining structures in a state-controlled road	Note: Soil and rocks should be tested in accordance with AS1289 – Methods of testing soils for engineering purposes and AS4133 2005 – Methods of testing rocks for engineering purposes.
environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.	AND
	AO35.2 Compaction of fill is carried out in accordance with the requirements of AS1289.0 2000 – Methods of testing soils for engineering purposes.
PO36 Development does not result in an actionable	No acceptable outcome is prescribed.
<b>nuisance</b> , or worsening of, stormwater, flooding or drainage impacts in a <b>future state-controlled road</b> .	
Note: Refer to the SDAP Supporting Information: Stormwater and drainage in a state-controlled road environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.	
<b>PO37</b> Run-off from the development site is not unlawfully discharged to a <b>future state-controlled road</b> .	AO37.1 Development does not create any new points of discharge to a <b>future state-controlled road</b> .

Performance outcomes	Acceptable outcomes
Note: Refer to the SDAP Supporting Information: Stormwater and drainage in a state-controlled road environment, Department of Transport and Main Roads, 2017, for further guidance on how to comply with this performance outcome.	AND  AO37.2 Stormwater run-off is discharged to a lawful point of discharge.  Note: Section 3.4 of the Queensland Urban Drainage Manual, Department of Energy and Water Supply, 2013, provides further information on lawful points of discharge.  AND
	AO37.3 Development does not worsen the condition of an existing lawful point of discharge to the future state-controlled road.

## 1.3 Reference documents

Department of Transport and Main Roads 2014, Design criteria for bridges and other structures manual

Department of Transport and Main Roads 2013, Roadside advertising guide

Department of Transport and Main Roads 2016, Road Planning and Design Manual 2nd Edition: Volume 3

Department of Transport and Main Roads 2017, SDAP Supporting Information: Environmental emissions in a state-controlled road environment.

Department of Transport and Main Roads 2017, SDAP Supporting Information: Filling, excavation and retaining structures in a state-controlled road environment.

Department of Transport and Main Roads 2017, SDAP Supporting Information: Stormwater and drainage in a state-controlled road environment.

Department of Transport and Main Roads 2017, SDAP Supporting Information: Vehicular access to a state-controlled road.

Department of Transport and Main Roads 2017, Guide to traffic impact assessment

Department of Transport and Main Roads 2015, Road drainage manual

Department of Energy and Water Supply 2013, Queensland Urban Drainage Manual

Department of Transport and Main Roads 2013, Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise)

Department of Transport and Main Roads 2016, Transport Noise Management Code of Practice: Volume 2 (Construction Noise and Vibration)

International Erosion Control Association Australasia, Best Practice Erosion and Sediment Control document

Standards Australia 2005, AS4133.0-2005 - Methods of testing rocks for engineering purposes

Standards Australia 2000, AS1289.0-2000 – Methods of testing soils for engineering purposes

Standards Australia 1997, AS1055.1–1997 Acoustics – Description and measurement of environmental noise

Queensland Government, Queensland Development Code 2015 MP4.4 Buildings in a transport noise corridor

The following documents can be obtained by contacting the relevant Department of Transport and Main Roads regional office:

Department of Transport and Main Roads 2013, Service Centre Policy

Department of Transport and Main Roads 2013, Access policy for roadside service centre facilities on limited access roads

## 1.4 Glossary of terms

### Accommodation activity means any of the following:

- 1. caretaker's accommodation
- 2. community residence
- 3. dual occupancy
- 4. dwelling house
- 5. dwelling unit
- 6. multiple dwelling
- 7. relocatable home park
- 8. residential care facility
- 9. resort complex
- 10. retirement facility
- 11. rooming accommodation
- 12. short-term accommodation
- 13. tourist park
- 14. a development with a combination of uses 1 to 13.

**Actionable nuisance** means where stormwater or surface water drainage to a downstream property causes a loss of enjoyment of property or physical damage to property (termed 'nuisance') such that the nuisance is actionable in law.

Note: See the Queensland Urban Drainage Manual, Department of Energy and Water Supply, 2013 for further information.

#### Childcare centre see schedule 24 of the Planning Regulation 2017.

Note: Childcare centre means the premises used for care, education and minding, but not residence, of children.

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA mapping system** is available on the department's website.

#### **Educational establishment** see schedule 24 of the Planning Regulation 2017.

Note: Educational establishment means the use of premises for:

- training and instruction to impart knowledge and develop skills; or
- 2. student accommodation, before or after school care, or vacation care, if the use is ancillary to the use in paragraph 1.

#### Future state-controlled road see schedule 6 of the Transport Infrastructure Act 1994.

Note: **Future state-controlled road** means a road or land that the chief executive administering the *Transport Infrastructure Act 1994* has, by written notice given to a local government and published in the gazette, indicated is intended to become a **state-controlled road** under section 42 of that Act.

See the **DA mapping system**.

#### Habitable room see the Building Code of Australia.

Note: **Habitable room** means a room used for normal domestic activities, and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom but excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

#### Hospital see schedule 24 of the Planning Regulation 2017.

Note: Hospital means the use of premises for

- 1. the medical or surgical care or treatment of patients, whether or not the care or treatment requires overnight accommodation; or
- 2. providing accommodation for patients; or
- 3. providing accommodation for employees, or any other use, if the use is ancillary to the use in paragraphs 1 or 2.

**Indoor education area** means an enclosed area within a **childcare centre** or **educational establishment** intended for use for the training or teaching of people including a classroom, lecture hall/theatre and library.

**Indoor play area** means an enclosed area within a **childcare centre** or **educational establishment** intended for use for children's play. This term excludes functional areas such as bathrooms, food preparation areas, washing facilities and other spaces of a specialised nature.

#### Lawful point of discharge see the Queensland Urban Drainage Manual 2013.

Note: **Lawful point of discharge** means a point of discharge which is either under the control of a local authority or statutory authority, or at which discharge rights have been granted by registered easement in favour of the local authority or statutory authority, and at which discharge from a development will not create a worse situation for downstream property owners than that which existed prior to the development.

#### Limited access road see the Transport Infrastructure Act 1994.

Note: Limited access road means a state-controlled road, or part of a state-controlled road, declared to be a limited access road under section 54 of the *Transport Infrastructure Act 1994*. See **DA mapping system**.

#### Limited access policy see the Transport Infrastructure Act 1994.

Note: Limited access policy means a policy for a limited access road prepared under section 54(4) of the Transport Infrastructure Act 1994.

A limited access policy can be obtained by contacting the appropriate Department of Transport and Main Roads regional office.

#### Local planning instrument see section 8 of the *Planning Act 2016*.

Note: Local planning instrument means a planning scheme, temporary local planning instrument or planning scheme policy.

Local road means a road controlled by a local government authority.

#### New or changed access see schedule 24 of the Planning Regulation 2017.

Note: New or changed access between premises and a road or state transport corridor means:

- 1. the use of a new location as a relevant vehicular access between the premises and the road or corridor; or
- 2. the construction of a new relevant vehicular access between the premises and the road or corridor; or
- 3. the extension of an existing relevant vehicular access between the premises and the road or corridor; or
- an increase in the number of vehicles regularly using an existing relevant vehicular access between the premises and the road or corridor; or
- a change in the type of vehicles regularly using an existing relevant vehicular access between the premises and the road or corridor.

**Outdoor education area** means outdoor areas intended for use for the training or teaching of persons. This term does not include playgrounds or outdoor sport and recreational areas.

#### Outdoor play area see the Queensland Development Code.

Note: **Outdoor play area** means an unenclosed area located outside the external walls of the building. This term only includes playgrounds/play areas in a **childcare centre** or **educational establishment**.

Outdoor space for passive recreation means private open space, communal open space or public open space.

#### Patient care area see the Building Code of Australia.

Note: **Patient care area** means a part of a health-care building normally used for the treatment, care, accommodation, recreation, dining and holding of patients including a ward area and treatment area. A ward area means that part of a **patient care area** for resident patients and may contain areas for accommodation, sleeping, associated living and nursing facilities. A treatment area means an area within a **patient care area** such as an operating theatre and rooms used for recovery, minor procedures, resuscitation, intensive care and coronary care from which a patient may not be readily moved.

**Planned upgrade** means an extension, upgrade, or duplication of state transport infrastructure or transport networks for which affected land has been identified

- 1. in a publicly available government document; or
- 2. in written advice to affected land owners.

Note: Government documents are Commonwealth, state or local government documents that include a statement of intent for, or a commitment to, a planning outcome or infrastructure provision. See the **DA mapping system**.

Private open space means an outdoor space for the exclusive use of occupants of a building.

**Public passenger service** see schedule 3 of the *Transport Operations (Passenger Transport) Act 1994.* Note: **Public passenger service** means a service for the carriage of passengers if:

- 1. the service is provided for fare or other consideration; or
- 2. the service is provided in the course of a trade or business (but not if it is provided by an employer solely for employees); or
- 3. the service is a courtesy or community transport service; and

4. includes a driver service and a service for the administration of taxi services, but does not include a service excluded from the *Transport Operations (Passenger Transport) Act 1994* by a regulation.

## **Public passenger transport infrastructure** see section 3 of the *Transport Planning and Coordination Act* 1994.

Note: **Public passenger transport infrastructure** means infrastructure for, or associated with, the provision of public passenger transport, including, but not limited to:

- transport, including, but not limited to. 1. a transit terminal for **public passenger services** (for example, an airport terminal, a coach terminal, a cruise ship terminal); or
- 2. a ferry terminal, jetty, pontoon or landing for ferry services; or
- 3. a bus stop, bus shelter, bus station or bus lay-by; or
- 4. a busway station; or
- a light rail station; or
- 6. a taxi rank, limousine rank or limousine standing area; or
- 7. a railway station; or
- 8. vehicle parking and set-down facilities; or
- 9. pedestrian and bicycle paths and bicycle facilities; or
- 10. a road on which a public passenger transport service operates.

## **Relevant residential building** see section 6 of the Queensland Development Code Mandatory Part 4.4: Buildings in a Transport Noise Corridor.

Note: A building is a relevant residential building if:

- 1. a building development application for the construction of the building is made after 31 August 2010; and
- 2. the building:
  - a. is a class 1, 2, 3 or building
  - b. is located in a transport noise corridor
  - c. is no a relocated building
- the building development approval for the construction of the building was not given under the building assessment provisions in force immediately before 1 September 2010, under section 37 of the Building Act 1975.

## **Relocated building** see section 7 of Queensland Development Code Mandatory Part 4.4: Buildings in a Transport Noise Corridor.

Note: A building is a **relocated building** if the building:

- 1. is a class 1, 2, 3 or 4 building
- 2. was constructed on an allotment (the first allotment) where it was used as a residence
- 3. is relocated from:
  - a. the first allotment to another allotment; or
  - b. a site on the first allotment to another site on the first allotment.

**Retaining structures** means retention **structures** and systems such as walls, batters, anchors, bolts, soil nails, shoring, piles, piers, beams and similar **structures**.

#### Road transport infrastructure see schedule 6 of the Transport Infrastructure Act 1994.

Note: Road transport infrastructure means transport infrastructure relating to roads.

#### Road works see schedule 6 of the Transport Infrastructure Act 1994.

Note: Road works means:

- 1. works done for:
  - a. establishing or constructing roads or things associated with roads; or
  - b. maintaining roads or things associated with roads (other than public utility plant); or
  - c. facilitating the operation or safety of road transport infrastructure; or
  - d. establishing, constructing or maintaining road transport infrastructure, other than road transport infrastructure if the works are:
    - i. directly related to an activity mentioned in subparagraph a, b and c
    - ii. necessary for the safety, efficiency, operation or structural integrity of transport infrastructure, or
- 2. road access works; or
- 3. works declared under a regulation to be road works.

#### State-controlled road means:

- 1. a state-controlled road within the meaning of the Transport Infrastructure Act 1994, schedule 6; or
- 2. state toll road corridor land.

Note: See the DA mapping system.

Structure means any built structure as well as retaining structures.

#### Transport noise corridor see chapter 8B the Building Act 1975.

Note: Transport noise corridor means land designated under chapter 8B of the Building Act 1975 as a transport noise corridor.

**Type 1 multi-modal corridor** means a transport corridor that includes a **state-controlled road** and at least one of the following:

1. a busway; or

- light rail; or
   a railway with 15 or fewer passing trains per day.

## 1.5 Abbreviations

dB(A) – decibels measured on the 'A' frequency weighting network

RPEQ - Registered Professional Engineer of Queensland

# State code 2: Development in a railway environment

## 2.1 Purpose statement

The purpose of the code is to protect **railways**, future **railways** and other infrastructure in a **railway corridor** from adverse impacts of development. The purpose of this code is also to protect the safety of people using, and living and working near, **railways**.

Specifically, this code seeks to ensure:

- 1. development does not create a safety hazard for users of a **railway**, by increasing the likelihood or frequency of loss of life or serious injury
- 2. development does not compromise the structural integrity of railways, rail transport infrastructure, other rail infrastructure or railway works
- 3. development does not result in a worsening of the physical condition or operating performance of **railways** and the rail network
- 4. development does not compromise the state's ability to construct **railways** and future **railways**, or significantly increase the cost to construct **railways** and future **railways**
- 5. development does not compromise the state's ability to maintain and operate **railways**, or significantly increase the cost to maintain and operate **railways**
- 6. the community is protected from significant adverse impacts resulting from environmental emissions generated by a **railway**.

# 2.2 Performance outcomes and acceptable outcomes

Development that is in a **railway** environment should demonstrate compliance with the relevant provisions of table 2.2.1 and table 2.2.2.

Development that is in a future **railway** environment should demonstrate compliance with the relevant provisions of table 2.2.3.

Table 2.2.1: Development in a railway environment

Performance outcomes	Acceptable outcomes		
Buildings and structures			
All railways			
PO1 The location of buildings, structures, infrastructure, services and utilities does not create a safety hazard in a railway corridor or cause damage to, or obstruct, rail transport infrastructure or other rail infrastructure.	AO1.1 Buildings, structures, infrastructure, services and utilities are not located in a railway corridor.  AND  AO1.2 Buildings, structures, infrastructure, services and utilities can be maintained without requiring access to a railway corridor.  AND  AO1.3 Buildings, structures and infrastructure are		
	set back horizontally a minimum of 3 metres from the outermost projection of <b>overhead line equipment</b> .  Note: Section 2.3 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads,		

Performance outcomes	Acceptable outcomes
- Charmanes suresmos	2015 provides guidance on how to comply with this acceptable
	outcome.
	AND
	AO1.4 The lowest part of development in or over a
	<ul><li>railway is a minimum of:</li><li>7.9 metres above the railway track where the</li></ul>
	proposed development extends along the
	railway for a distance of less than 40 metres
	2. 9 metres above the <b>railway</b> track where the
	development extends along the <b>railway</b> for a
	distance of between 40 and 80 metres.
	AND
	AO1.5 Pipe work, services and utilities:
	are not attached to rail transport infrastructure
	or other rail infrastructure  2. do not penetrate through the side of any
	proposed building element or <b>structure</b> where
	built to boundary in, over or abutting a <b>railway</b>
	corridor.
PO2 Buildings and structures are located to not	AO2.1 Buildings and structures are set back
interfere with, or impede access to, a <b>railway</b>	horizontally a minimum of 3 metres from a <b>railway</b>
bridge.	bridge.
	AND
	AO2.2 Permanent structures are not located below
	or abutting a <b>railway bridge</b> .
	AND
	AO2.3 Temporary activities below or abutting a
	railway bridge do not impede access to a railway
	corridor.
	Note: Temporary activities below or abutting a <b>railway bridge</b> could include, for example, car parking or outdoor storage.
PO3 Development does not add or remove loading	No acceptable outcome is prescribed.
that will cause damage to rail transport	·
infrastructure or a railway corridor.	
Note: To demonstrate compliance with this performance outcome,	
it is recommended a RPEQ certified geotechnical assessment,	
prepared in accordance with the Guide to Development in a Transport Environment: Rail, Department of Transport and Main	
Roads 2015 is provided.	
PO4 Development above a railway is designed to	No acceptable outcome is prescribed.
enable natural ventilation and smoke dispersion in	
the event of a fire emergency.	
Note: To demonstrate compliance with the performance outcome	
it is recommended the applicant contact the Queensland Fire and Emergency Service and relevant <b>railway manager</b> to determine	
the fire scenarios to be used to inform ventilation design.	
Modelling of smoke dispersion should also be undertaken by a	
RPEQ to predict the spread of combustion products and inform the ventilation design. Section 5.1 – Development over a railway	
of the Guide to Development in a Transport Environment: Rail,	
Department of Transport and Main Roads, 2015, provides guidance on how to comply with this acceptable outcome.	
O Transfer de la constante	·

Performance outcomes	Acceptable outcomes
PO5 Construction activities do not cause ground	No acceptable outcome is prescribed.
movement or vibration impacts in a railway	
corridor.	
Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment, prepared in accordance with section 2.7 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015 is provided.	
<b>PO6</b> Buildings and <b>structures</b> in a <b>railway corridor</b> are designed and constructed to remain structurally sound in the event of a derailed train.	AO6.1 Buildings and structures, in a railway corridor including piers or supporting elements, are designed and constructed in accordance with Civil Engineering Technical Requirement – CIVIL-SR-012 Collision protection of supporting elements adjacent to railways, Queensland Rail, 2011, AS5100 Bridge design and AS1170 Structural design actions.  Note: Section 3.2 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads,
	2015 provides guidance on how to comply with this acceptable outcome.
<b>PO7</b> Buildings and <b>structures</b> in <b>high risk locations</b> and where also located within 10 metres of the centreline of the nearest <b>railway</b> track are designed and constructed to remain structurally sound in the event of a derailed train.	AO7.1 Buildings and structures, in a railway corridor including piers or supporting elements, are designed and constructed in accordance with Civil Engineering Technical Requirement CIVIL-SR-012 Collision protection of supporting elements adjacent to railways, Queensland Rail, 2011, AS5100 Bridge design and AS1170 Structural design actions.
	Note: Section 3.2 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015 provides guidance on how to comply with this acceptable outcome.
<b>PO8</b> Buildings and <b>structures</b> in a <b>railway corridor</b> are designed and constructed to prevent projectiles from being thrown onto a <b>railway</b> .	AO8.1 Buildings and structures in a railway corridor include throw protection screens in accordance with the relevant provisions of the Civil Engineering Technical Requirement – CIVIL-SR-005 Design of buildings over or near railways, Queensland Rail, 2011, and the Civil Engineering Technical Requirement – CIVIL-SR-008 Protection screens, Queensland Rail.
	AND
	AO8.2 Road, pedestrian and bikeway bridges over a railway include throw protection screens in accordance with the relevant provisions of the Civil Engineering Technical Requirement – CIVIL-SR-005 Design of buildings over or near railways, Queensland Rail, 2011, and the Civil Engineering Technical Requirement – CIVIL-SR-008 Protection screens, Queensland Rail.
	Note: Section 2.4 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this outcome.
PO9 Buildings, and structures, other than accommodation activities, are designed and constructed to prevent projectiles from being thrown onto a railway from any publicly accessible areas	AO9.1 Publicly accessible areas located within 20 metres from the centreline of the nearest railway track do not directly overlook a railway.
located within 20 metres from the centreline of the nearest <b>railway</b> track.	OR

Performance outcomes	Acceptable outcomes
1 CHOMINICE OUTCOMES	AO9.2 Buildings and structures are designed to
	ensure publicly accessible areas located within 20
	metres of the centreline of the nearest <b>railway</b> track
	and that overlook the <b>railway</b> include throw
	protection screens in accordance with the relevant
	provisions of the Civil Engineering Technical
	Requirement – CIVIL-SR-005 Design of buildings
	over or near railways, Queensland Rail, 2011, and
	the Civil Engineering Technical Requirement –
	CIVIL-SR-008 Protection screens, Queensland Rail.
	Note: Section 2.4 of the Guide to Development in a Transport
	Environment: Rail, Department of Transport and Main Roads,
Filling everyties and retaining storestones	2015, provides guidance on how to comply with this outcome.
Filling, excavation and retaining structures	No secretal les formes se
PO10 Filling, excavation and retaining structure do	No acceptable outcome is prescribed.
not interfere with, or result in damage to,	
infrastructure or services in a railway corridor.	
Note: Information on the location of services and public utility	
plants railway corridor can be obtained from the railway manager. Where development will impact on an existing or future	
service or public utility plant in a <b>railway corridor</b> such that the	
service or public utility plant will need to be relocated, the	
alternative alignment must comply with the standards and design	
specifications of the relevant service or public utility provider, and	
any costs of relocation are to be borne by the developer.	Nie gegentalie gestauten 22 august 22 august 23 august 24 august 25 august 2
PO11 Filling, excavation, building foundations and	No acceptable outcome is prescribed.
retaining structures do not undermine, or cause	
subsidence of, a railway corridor.	
Note: To demonstrate compliance with this performance systems	
Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is	
provided, prepared in accordance with section 2.7 of the Guide to	
Development in a Transport Environment: Rail, Department of	
Transport and Main Roads, 2015.	
PO12 Filling and excavation, building foundations	No acceptable solution is prescribed.
and retaining structures do not cause ground	
water disturbance in a railway corridor.	
Note: To demonstrate compliance with this performance outcome,	
it is recommended a RPEQ certified geotechnical assessment is	
provided, prepared in accordance with section 2.7 of the Guide to	
Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015.	
PO13 Excavation, boring, piling, blasting or fill	No acceptable outcome is prescribed.
	Two acceptable outcome is prescribed.
compaction during construction of a development	
does not result in ground movement or vibration	
impacts that would cause damage or nuisance to a	
railway corridor, rail transport infrastructure or	
railway works.	
Note: To demonstrate compliance with this performance outcome,	
it is recommended a RPEQ certified geotechnical assessment is	
provided, prepared in accordance with section 2.7 of the Guide to	
Development in a Transport Environment: Rail, Department of	
Transport and Main Roads, 2015.	
PO14 Filling and excavation material does not cause	AO14.1 Development does not store fill, spoil or any
an obstruction or nuisance in a railway corridor.	other material in, or adjacent to, a railway corridor.

Stormwater and drainage	
PO15 Development does not result in an actionable	No acceptable outcome is prescribed.
nuisance or worsening of stormwater, flooding or	·
drainage impacts in a <b>railway corridor</b> .	
Note: Section 2.8 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	
<b>PO16</b> Run-off from the development site during construction of development does not cause siltation of stormwater infrastructure affecting a <b>railway corridor</b> .	<b>AO16.1</b> Run-off from the development site during construction of development is not discharged to stormwater infrastructure in a <b>railway corridor</b> .
Access	
PO17 Development prevents unauthorised access to a railway corridor.	AO17.1 Where development is abutting a railway corridor fencing is provided along the property boundary with the railway corridor in accordance with the railway manager's standards.
	Note: It is recommended the applicant contact the railway manager for advice regarding applicable fencing standards.
	AND
	AO17.2 A road barrier designed in accordance with Civil Engineering Technical Requirement – CIVIL-SR-007 Design and selection criteria for road/rail interface barriers, Queensland Rail 2011, and certified by an RPEQ, is installed along any roads abutting a railway corridor.
	AND
	AO17.3 Proposed vehicle manoeuvring areas, driveways, loading areas or carparks abutting a railway corridor include rail interface barriers.
	Note: Section 2.4 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with acceptable outcome 16.3.
PO18 Development does not obstruct existing access to a railway corridor.	AO18.1 Development is sited and designed to ensure existing authorised access points and access routes for maintenance and emergency works to a railway corridor are clear from obstructions at all times.
PO19 Access to a railway corridor does not create a safety hazard for users of a railway, or result in a worsening of operating conditions on a railway.	AO19.1 Development does not require a new railway crossing.
	AND
	AO19.2 Development does not propose new or temporary structures or works connecting to rail transport infrastructure or other rail infrastructure.
	AND
	AO19.3 Vehicle access points achieve sufficient clearance from a railway level crossing in accordance with AS1742.7:2016 – Manual of uniform traffic control devices, Part 7: Railway

crossings, by providing minimum 5 metres clearance from the edge running rail (outer rail), plus the length of the largest vehicle anticipated on-site.

Note: Section 2.2 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this acceptable outcome.

PO20 Development does not damage or interfere with public passenger transport infrastructure, public passenger services or pedestrian and cycle access to public passenger transport infrastructure and public passenger services.

**AO20.1** Development does not necessitate the relocation of existing **public passenger transport infrastructure**.

AND

**AO20.2** Vehicular access and associated road access works for a development is not located within 5 metres of existing **public passenger transport infrastructure**.

AND

AO20.3 On-site vehicle circulation is designed give priority to entering vehicles at all times so vehicles using a vehicular access do not obstruct public passenger transport infrastructure and public passenger services or obstruct pedestrian or cyclist access to public passenger transport infrastructure and public passenger services.

AND

AO20.4 The normal operation of public passenger transport infrastructure or public passenger services is not interrupted during construction of the development.

#### Planned upgrades

PO21 Development does not impede delivery of planned upgrades of rail transport infrastructure.

**AO21.1** Development is not located on land identified by the Department of Transport and Main Roads as land required for **planned upgrades** to rail transport infrastructure.

Note: Land required for the **planned upgrade** of **rail transport infrastructure** is identified in the **DA mapping system**.

OR

**AO21.2** Development is sited and designed so that permanent buildings, **structures**, infrastructure, services or utilities are not located on land identified by the Department of Transport and Main Roads as land required for the **planned upgrade** of **rail transport infrastructure**.

OR all of the following acceptable outcomes apply:

AO21.3 Structures and infrastructure located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a of rail transport infrastructure are able to be readily relocated or removed without

materially affecting the viability or functionality of the development.

AND

**AO21.4** Development does not involve filling and excavation of, or material changes to, land required for a **planned upgrade** of **rail transport infrastructure**.

AND

**AO21.5** Land is able to be reinstated to the predevelopment condition at the completion of the use.

#### **Network safety**

**PO22** Development involving dangerous goods adjacent to a **railway corridor** does not adversely impact on the safety or operations of a **railway**.

Note: Development involving **dangerous goods**, or hazardous chemicals above the threshold quantities listed in table 5.2 of the Model Planning Scheme Development Code for Hazardous Industries and Chemicals, Office of Industrial Relations, Department of Justice and Attorney-General, 2016, should demonstrate that impacts on a **railway** from a fire, explosion, spill, gas emission or **dangerous goods** incident can be appropriately mitigated.

Section 2.6 – Dangerous goods and fire safety of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.

**PO23** Development does not adversely impact on the safety of a **railway crossing**.

Note: It is recommended a traffic impact assessment be prepared to demonstrate compliance with this performance outcome. An impact on a level crossing may require an Australian Level Crossing Assessment Model (ALCAM) assessment to be undertaken. Section 2.2 – Railway crossing safety of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.

AO22.1 Development does not involve handling or storage of hazardous chemicals above the threshold quantities listed in table 5.2 of the Model Planning Scheme Development Code for Hazardous Industries and Chemicals, Office of Industrial Relations, Department of Justice and Attorney-General, 2016.

**AO23.1** Development does not require a new railway crossing.

OR

**AO23.2** A new **railway crossing** is grade separated.

Note: It is recommended a traffic impact assessment be prepared to demonstrate compliance with this acceptable outcome. An impact on a level crossing may require an Australian Level Crossing Assessment Model (ALCAM) assessment to be undertaken. Section 2.2 – Railway crossing safety of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this acceptable outcome.

OR all of the following acceptable outcomes apply:

AO23.3 Upgrades to a level crossing are designed and constructed in accordance with AS1742.7 – Manual of uniform traffic control devices, Part 7: Railway crossings and applicable railway manager's standard drawings.

AND

AO23.4 Vehicle access points achieve sufficient clearance from a level crossing in accordance with AS1742.7 – Manual of uniform traffic control devices, Part 7: Railway crossings by providing a minimum clearance of 5 metres from the edge

running rail (outer rail) plus the length of the largest vehicle anticipated on-site.

AND

AO23.5 On-site vehicle circulation is designed to give priority to entering vehicles at all times to ensure vehicles do not queue in a railway crossing.

#### Table 2.2.2: Environmental emissions

Statutory note: Where development is adjacent to a **railway** with fewer than 15 passing trains per day, compliance with table 2.2.2 is not required.

Performance outcomes	Acceptable outcomes
Noise	
Accommodation activities	
PO24 Development involving:  1. an accommodation activity; or  2. land for a future accommodation activity  minimized points introduced from a relivery or type 2	AO24.1 A noise barrier or earth mound is provided which is designed, sited and constructed:  1. to meet the following external noise criteria at all feeders of the building experience:
minimises noise intrusion from a railway or type 2 multi-modal corridor in habitable rooms.	facades of the building envelope: a. ≤65 dB(A) L <sub>eq</sub> (24 hour) façade corrected b. ≤87 dB(A) (single event maximum sound pressure level) façade corrected 2. in accordance with the Civil Engineering Technical Requirement – CIVIL-SR-014 Design of noise barriers adjacent to railways, Queensland Rail, 2011.
	Note: To demonstrate compliance with the acceptable outcome, it is recommended a RPEQ certified noise assessment report be provided.
	If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used.
	In some instances, the design of noise barriers and mounds to achieve the noise criteria above the ground floor may not be reasonable or practicable. In these instances, any relaxation of the criteria is at the discretion of the Department of Transport and Main Roads.
	OR all of the following acceptable outcomes apply:
	AO24.2 Buildings which include a habitable room are setback the maximum distance possible from a railway or type 2 multi-modal corridor.
	AND
	AO24.3 Buildings are designed and oriented so that habitable rooms are located furthest from a railway or type 2 multi-modal corridor.
	AND
	AO24.4 Buildings (other than a relevant residential building or relocated building) are designed and constructed using materials which ensure that habitable rooms meet the following internal noise criteria:

Performance outcomes	Acceptable outcomes
	<ol> <li>≤45 dB(A) single event maximum sound pressure level.</li> </ol>
	Note: Noise levels from <b>railways</b> or <b>type 2 multi-modal corridors</b> are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise.
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report be provided.
	Habitable rooms of relevant residential buildings located within a transport noise corridor must comply with the Queensland Development Code MP4.4 Buildings in a transport noise corridor, Queensland Government, 2015. Transport noise corridors are mapped on the State Planning Policy Interactive Mapping System.
PO25 Development involving an accommodation	AO25.1 A noise barrier or earth mound is provided
activity minimises noise intrusion from a railway or type 2 multi-modal corridor in outdoor spaces for passive recreation.	which is designed, sited and constructed:  1. to meet the following external noise criteria in outdoor spaces for passive recreation:  a. ≤62 dB(A) Leq (24 hour) free field  b. ≤84 dB(A) (single event maximum sound pressure level) free field  2. in accordance with the Civil Engineering Technical Requirement – CIVIL-SR-014 Design of noise barriers adjacent to railways, Queensland Rail, 2011.
	OR
	AO25.2 Each dwelling has access to an outdoor space for passive recreation which is shielded from a railway or type 2 multi-modal corridor by a building, a solid gap-free fence, or other solid gap-free structure.
	AND
	AO25.3 Each dwelling with a balcony directly exposed to noise from a railway or type 2 multimodal corridor has a continuous solid gap-free balustrade (other than gaps required for drainage purposes to comply with the Building Code of Australia).
Childcare centres and educational establishments	
PO26 Development involving a: a. childcare centre; or b. educational establishment minimises noise intrusion from a railway or type 2 multi-modal corridor in indoor education areas and indoor play areas.	<ul> <li>AO26.1 A noise barrier or earth mound is provided which is designed, sited and constructed:</li> <li>1. to meet the following external noise criteria at all facades of the building envelope: <ul> <li>a. ≤65 dB(A) L<sub>eq</sub> (1 hour) façade corrected (maximum hour during opening hours)</li> <li>b. ≤87 dB(A) (single event maximum sound pressure level) façade corrected</li> </ul> </li> <li>2. in accordance with the Civil Engineering Technical Requirement – CIVIL-SR-014 Design of noise barriers adjacent to railways, Queensland Rail, 2011.</li> </ul>

### Performance outcomes Acceptable outcomes Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report be provided. If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used. OR all of the following apply: AO26.2 Buildings which include an indoor education area, indoor play area or sleeping room are setback furthest from a railway or type 2 multimodal corridor as possible. AND AO26.3 Buildings are designed and oriented so that indoor education areas, indoor play areas or sleeping rooms are located furthest from a railway or type 2 multi-modal corridor. AND AO26.4 Buildings are designed and constructed using materials which ensure indoor education areas and indoor play areas meet the following internal noise criteria: ≤50 dB(A) single event maximum sound pressure level. **AND** AO26.5 Buildings are designed and constructed using material which ensure sleeping rooms in a childcare centre meet the following internal noise criteria: ≤45 dB(A) single event maximum sound pressure level. Note: Noise levels from railways or type 2 multi-modal corridors are measured in accordance with AS1055.1-1997 Acoustics – Description and measurement of environmental noise. To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report be

PO27 Development involving a:

- 1. childcare centre; or
- 2. educational establishment minimises noise intrusion from a railway or type 2 multi-modal corridor in outdoor education areas and outdoor play areas.

**AO27.1** A noise barrier or earth mound is provided which is designed, sited and constructed:

provided.

- to meet the following external noise criteria in each outdoor education area or outdoor play
  - a. ≤62 dB(A) L<sub>eq</sub> (24 hour) free field (between 6am and 6pm)
  - b. ≤84 dB(A) (single event maximum sound pressure level) free field
- in accordance with the Civil Engineering Technical Requirement – CIVIL-SR-014 Design of noise barriers adjacent to railways, Queensland Rail, 2011.

Performance outcomes	Acceptable outcomes
	Note: To demonstrate compliance with the acceptable outcome, it
	is recommended that a RPEQ certified noise assessment report be provided.
	be provided.
	OR
	AO27.2 Each outdoor education area and
	outdoor play area is shielded from noise generated
	from a railway or type 2 multi-modal corridor by a
	building, a solid gap-free fence, or other solid gap-
	free <b>structure</b> .
Hospitals	
PO28 Development involving a hospital minimises	AO28.1 Hospitals are designed and constructed
noise intrusion from a railway or a type 2 multi-	using materials which ensure ward areas meet the
modal corridor in patient care areas.	following internal noise criteria:
·	<ol> <li>≤45 dB(A) single event maximum sound</li> </ol>
	pressure level.
	procession to to the
	AND
	AO28.2 Hospitals are designed and constructed
	using
	materials which ensure <b>patient care areas</b> (other
	than ward areas) meet the following internal noise
	criteria:
	1. ≤50 dB(A) single event maximum sound
	pressure level.
	Note: Noise levels from railways or type 2 multi-madel
	Note: Noise levels from railways or type 2 multi-modal corridors are measured in accordance with AS1055.1–1997
	Acoustics – Description and measurement of environmental
	noise.
	To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report be
	provided.
Vibration	pioridod.
Hospitals	
PO29 Development involving a hospital located	AO29.1 Hospitals are designed and constructed to
within 25 metres of the centreline of the nearest	ensure vibration in the treatment area of a <b>patient</b>
	care area does not exceed a vibration dose value of
railway track minimises vibration impacts from a	
railway or type 2 multi-modal corridor in patient	0.1m/s <sup>1.75</sup> .
care areas.	AND
	AND
	AC20 2 Heapitals are designed and constructed to
	AO29.2 Hospitals are designed and constructed to
	ensure vibration in the ward area of a patient care
	area does not exceed a vibration dose value of
	0.4m/s <sup>1.75</sup> .
	Note: To demonstrate compliance with the acceptable suffered if
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified vibration assessment
	report be provided.
Air and light	
PO30 Development involving an accommodation	AO30.1 Each dwelling has access to an outdoor
activity minimises air quality impacts from a railway	space for passive recreation that is shielded from
in outdoor spaces for passive recreation.	a <b>railway</b> by a building, a solid gap-free fence, or
m outdoor opaces for passive recreation.	other solid gap-free structure.
PO31 Development involving a:	AO31.1 Each outdoor education area and
PO31 Development involving a:	
1. childcare centre; or	outdoor play area is shielded from a railway by a
2. educational establishment	

Performance outcomes	Acceptable outcomes
minimises air quality impacts from a railway in outdoor education areas and outdoor play areas.	building, a solid gap-free fence, or other solid gap-free <b>structure</b> .
PO32 Development involving an accommodation activity or hospital minimises lighting impacts from a railway.	AO32.1 Buildings for an accommodation activity or hospital are designed to minimise the number of windows or transparent/translucent panels facing a railway.
	OR
	AO32.2 Windows facing a railway include treatments to block light from a railway.

Table 2.2.3: Development in a future railway enviror Performance outcomes	Acceptable outcomes
PO33 Development does not impede delivery of rail transport infrastructure in a future railway corridor.	AO33.1 Development is not located in a future railway corridor.
	OR
	AO33.2 Development is sited and designed so that permanent buildings, structures, infrastructure, services or utilities are not located in a future railway corridor.
	OR all of the following acceptable outcomes apply:
	AO33.3 Structures and infrastructure located in a future railway corridor are able to be readily relocated or removed without materially affecting the viability or functionality of the development.
	AND
	AO33.4 Development does not involve filling and excavation of, or material changes to, a future railway corridor.
	AND
	AO33.5 Land is able to be reinstated to the predevelopment condition at the completion of the use.
<b>PO34</b> Filling and excavation, building foundations and <b>retaining structures</b> do not undermine or cause subsidence of, a <b>future railway corridor</b> .	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended that a RPEQ certified geotechnical assessment is provided, prepared in accordance with section 2.7 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015.	
<b>PO35</b> Fill material from a development site does not result in contamination of land for a <b>future railway</b>	AO35.1 Fill material is free of contaminants including acid sulfate content.
corridor.	Note: Soil and rocks should be tested in accordance with AS1280 – Methods of testing soils for engineering purposes and AS4133 2005 – Methods of testing rocks for engineering purposes.
	AND

Performance outcomes	Acceptable outcomes
	AO35.2 Compaction of fill is carried out in accordance with the requirements of AS1289.0 2000 – Methods of testing soils for engineering purposes.
<b>PO36</b> Development does not result in an <b>actionable nuisance</b> or worsening of stormwater, flooding or drainage impacts in a <b>future railway corridor</b> .	No acceptable outcome is prescribed.

## 2.3 Reference documents

Department of Justice and Attorney-General (Office of Industrial Relations) 2016, Model Planning Scheme Development Code for Hazardous Industries and Chemicals

Department of Transport and Main Roads 2015, Guide to Development in a Transport Environment: Rail

Department of Transport and Main Roads 2014, Design criteria for bridges and other structures manual

Department of Transport and Main Roads 2015, Road drainage manual

Department of Transport and Main Roads 2016, Road Planning and Design Manual 2<sup>nd</sup> edition: Volume 3

Department of Transport and Main Roads 2016, Transport Noise Management Code of Practice Volume 2: Construction noise and vibration

Department of Transport and Main Roads, SD1474 - Steel beam guardrail - Installation and setout

Department of Energy and Water Supply 2013, Queensland Urban drainage manual

Standards Australia 2000, AS1289.0-2000 – Methods of testing soils for engineering purposes

Standards Australia 2010, AS2436–2010 – Guide to noise and vibration control on construction, demolition and maintenance sites

Standards Australia 2005, AS4133.0-2005 - Methods of testing rocks for engineering purposes

Department of Infrastructure, Local Government and Planning 2016, State Planning Policy – state interest guideline: Emissions and hazardous activities

Queensland Rail, Civil Engineering Technical Requirements and standard drawings:

Civil-SR-001 – Design of road overbridges

Civil-SR-002 - Work in or about Queensland Rail property

Civil-SR-003 – Requirements for work on or near high voltage overhead line equipment and low voltage services

Civil-SR-005 - Design of buildings over or near railways

Civil-SR-006 – Design of footbridges

Civil-SR-007 – Design and selection criteria for road/rail interface barriers

Civil-SR-008 - Protection screens

Civil-SR-012 – Collision protection of supporting elements adjacent to railways

Civil-SR-014 – Design of noise barriers adjacent to railways

Civil-SR-016 – Requirements for services under the railway corridor (non-QR services)

QR-C-S3231 - 1800mm high timber paling fence

QR-C-S3236 - Standard rural fences

QR-C-S3230 - Standard security fence

Standard Drawing 2754 – Standard clearances for new structures

Standard Drawing 2614 – Standard rural fences (fencing with rail posts)

International Erosion Control Association Australasia, Best Practice Erosion and Sediment Control document

# 2.4 Glossary of terms

#### Accommodation activity means any of the following:

- 1. caretaker's accommodation
- 2. community residence
- 3. dual occupancy
- 4. dwelling house
- 5. dwelling unit
- 6. multiple dwelling
- 7. relocatable home park
- 8. residential care facility
- 9. resort complex
- 10. retirement facility
- 11. rooming accommodation
- 12. short-term accommodation
- 13. tourist park
- 14. a development with a combination of uses 1 to 13.

**Actionable nuisance** means where stormwater or surface water drainage to a downstream property causes a loss of enjoyment of property or physical damage to property (termed 'nuisance') such that the nuisance is actionable in law.

Note: See the Queensland Urban Drainage Manual, Department of Energy and Water Supply, 2013 for further information.

#### ADG Code see schedule 1 of the Work Health and Safety Act 2011.

Note: **ADG Code** means the Australian Code for the Transport of Dangerous Goods by Road and Rail approved by the Australian Transport Council, as updated from time to time.

#### Childcare centre see schedule 24 of the Planning Regulation 2017.

Note: Childcare centre means the use of premises for the care, education and minding, but not residence, of children.

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The DA mapping system is available on the department's website.

Dangerous goods see schedule 1 of the Work Health and Safety Act 2011.

Note: Dangerous goods means:

- 1. asbestos, or
- 2. anything defined under the ADG Code as:
  - a. dangerous goods; or
  - b. goods too dangerous to be transported.

#### Educational establishment see schedule 24 of the Planning Regulation 2017.

Note: Educational establishment means the use of premises for:

- 1. training and instruction to impart knowledge and develop skills; or
- 2. student accommodation, before or after school care, or vacation care, if the use is ancillary to the use in paragraph 1.

#### Future railway corridor see schedule 24 of the Planning Regulation 2017.

Note: Future railway corridor means:

1. land identified in a guideline made under the *Transport Planning Act*, section 8E as a future transport corridor for:

- a. rail transport infrastructure: or
- b. other rail infrastructure; or
- c. railway works; or
- future railway land.

See the DA mapping system.

#### Future railway land see section 242 of the Transport Infrastructure Act 1994.

Note: Land becomes **future railway land** when the chief executive [TIA], by written notice to the relevant local government and in the gazette, indicates that the land is intended to be used for a **railway. Future railway land** ceases to be **future railway land** when it is subleased to a **railway manager** under section 240(4) of the *Transport Infrastructure Act 1994*. If the chief executive [TIA] decides that **future railway land** is no longer to be used for the **railway**, the chief executive [TIA] must give written notice of that fact to the relevant local government and in the gazette.

#### Habitable room see the Building Code of Australia.

Note: **Habitable room** means a room used for normal domestic activities, and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom but excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

**High risk location** means properties adjacent to the **railway corridor** where the risk of train derailment warrants a risk assessment and consideration of possible structural responses incorporated into adjacent development.

Note: See the DA mapping system.

#### Hospital see schedule 24 of the Planning Regulation 2017.

Note: Hospital means the use of premises for:

- 1. the medical or surgical care or treatment of patients, whether or not the care or treatment requires overnight accommodation; or
- 2. providing accommodation for patients; or
- 3. providing accommodation for employees, or any other use, if the use is ancillary to the use in paragraphs 1 or 2.

**Indoor education area** means an enclosed area within a **childcare centre** or **educational establishment** intended for use for the training or teaching of people including a classroom, lecture hall/theatre and library.

**Indoor play area** means an enclosed area within a **childcare centre** or **educational establishment** intended for use for children's play. This term excludes functional areas such as bathrooms, food preparation areas, washing facilities and other spaces of a specialised nature.

**Loading** means pressure or force exerted on land or infrastructure.

Other rail infrastructure see schedule 6 of the Transport Infrastructure Act 1994.

Note: Other rail infrastructure means:

- 1. freight centres or depots
- maintenance depots
- 3. office buildings or housing
- 4. rolling stock or other vehicles that operate on a railway
- workshops
- 6. any railway track, works or other thing that is part of anything mentioned in paragraphs 1 to 5.

**Outdoor education area** means outdoor areas intended for use for the training or teaching of persons. This term does not include playgrounds or outdoor sport and recreational areas.

#### Outdoor play area see the Queensland Development Code.

Note: **Outdoor play area** means an unenclosed area located outside the external walls of the building. This term only includes playgrounds/play areas in a **childcare centre** or **educational establishment**.

Outdoor space for passive recreation means private open space, communal open space or public open space.

**Overhead line equipment** means overhead lines, cabling and associated **structures** used to provide power to electric trains.

#### Patient care area see the Building Code of Australia.

Note: **Patient care area** means a part of a health-care building normally used for the treatment, care, accommodation, recreation, dining and holding of patients including a ward area and treatment area. A ward area means that part of a **patient care area** for resident patients and may contain areas for accommodation, sleeping, associated living and nursing facilities. A treatment area means an area within a **patient care area** such as an operating theatre and rooms used for recovery, minor procedures, resuscitation, intensive care and coronary care from which a patient may not be readily moved.

**Planned upgrade** means an extension, upgrade, or duplication of state transport infrastructure or transport networks for which affected land has been identified:

- 1. in a publicly available government document; or
- 2. in written advice to affected land owners.

Note: Government documents are Commonwealth, state or local government documents that include a statement of intent for, or a commitment to, a planning outcome or infrastructure provision. See the **DA mapping system**.

Private open space means an outdoor space for the exclusive use of occupants of a building.

#### Public passenger service see the Transport Operations (Passenger Transport) Act 1994.

Note: Public passenger service means a service for the carriage of passengers if:

- 1. the service is provided for fare or other consideration; or
- 2. the service is provided in the course of a trade or business (but not if it is provided by an employer solely for employees); or
- 3. the service is a courtesy or community transport service; and
- 4. includes a driver service and a service for the administration of taxi services, but does not include a service excluded from the *Transport Operations (Passenger Transport) Act 1994* by a regulation.

#### Public passenger transport infrastructure see the Transport Planning and Coordination Act 1994.

Note: Public passenger transport infrastructure means infrastructure for, or associated with, the provision of public passenger transport, including, but not limited to:

- 1. a transit terminal for public passenger services (for example, an airport terminal, a coach terminal, a cruise ship terminal), or
- 2. a ferry terminal, jetty, pontoon or landing for ferry services; or
- 3. a bus stop, bus shelter, bus station or bus lay-by; or
- 4. a busway station; or
- 5. a light rail station; or
- 6. a taxi rank, limousine rank or limousine standing area; or
- 7. a railway station; or
- 8. vehicle parking and set-down facilities; or
- 9. pedestrian and bicycle paths and bicycle facilities; or
- 10. a road on which a public passenger transport service operates.

#### Rail transport infrastructure see schedule 6 of the Transport Infrastructure Act 1994.

Note: Rail transport infrastructure means facilities necessary for operating a railway, including:

- . railway track and works built for the railway, including for example:
  - a. cuttings; or
  - b. drainage works; or
  - c. excavations; or
  - d. land fill; or
  - e. track support earthworks any of the following things that are associated with the railway's operation:
    - i. bridges; or
    - ii. communication systems; or
    - iii. machinery and other equipment; or
    - iv. marshalling yards; or
    - v. noticeboards, notice markers and signs; or
    - vi. overhead electrical power supply systems; or
    - vii. over-track structures; or
    - viii. platforms; or
    - ix. power and communication cables; or
    - x. service roads; or
    - xi. signalling facilities and equipment; or
    - xii. stations; or
    - xiii. survey stations, pegs and marks; or
  - xiv. train operation control facilities; or
  - xv. tunnels; or
  - under-track structures vehicle parking and set down facilities for intending passengers for a railway that are controlled or owned by a railway manager or the chief executive [TIA]; or
  - xvii. pedestrian facilities, including footpath paving, for the railway that are controlled or owned by a railway manager or the chief executive [TIA], but does not include other rail infrastructure.

#### Railway see schedule 6 of the Transport Infrastructure Act 1994.

Note: **Railway** means a guided system, or proposed guided system, designed for the movement of rolling stock that is capable of transporting passengers or freight, or both, on a **railway** track and:

- 1. includes:
  - a. rail transport infrastructure
  - b. a railway being or proposed to be built on future railway land
- 2. but does not include:
  - a. rolling stock
  - b. a railway mentioned in section 107(2) of the Transport Infrastructure Act 1994.

Railway bridge means a structure which crosses a watercourse, land, road or other obstacle, on which rail transport infrastructure or other rail infrastructure is located.

Railway corridor see schedule 24 of the Planning Regulation 2017.

Note: Railway corridor means:

- 1. land on which rail transport infrastructure or other rail infrastructure is situated; or
- 2. land on which railway works are carried out if the works relate to rail transport infrastructure or other rail infrastructure; or
- 3. land on which services for the maintenance or operation of **rail transport infrastructure** or **other rail infrastructure** are situated. See the **DA mapping system**.

Railway crossing see schedule 6 of the Transport Infrastructure Act 1994.

Note: Railway crossing means a level crossing, bridge or another structure used to cross over or under a railway.

Railway manager see schedule 6 of the Transport Infrastructure Act 1994.

Note: Railway manager means:

- 1. for a railway the person who is an accredited rail infrastructure manager in relation to railway operations relating to the railway; or
- 2. for **rail corridor** land the person who is an accredited rail infrastructure manager in relation to **railway** operations relating to the **railway** or proposed **railway** on or proposed to be on the **rail corridor** land.

Railway works see schedule 6 of the Transport Infrastructure Act 1994.

Note: Railway works means:

- 1. works for constructing, maintaining, altering or operating a railway or rolling stock; or
- 2. works for establishing, constructing or maintaining transport infrastructure, other than rail transport infrastructure, that are:
  - a. directly related to paragraph 1; and
  - b. necessary for the safety, efficiency and operational integrity of transport infrastructure; or
- 3. other works declared under a regulation to be railway works.

Relevant residential building see section 6 of the Queensland Development Code Mandatory Part 4.4:

Buildings in a Transport Noise Corridor.

Note: A building is a relevant residential building if:

- 1. a building development application for the construction of the building is made after 31 August 2010
- 2. the building:
  - a. is a class 1, 2, 3 or building
  - b. is located in a transport noise corridor
  - c. is not a relocated building
- 3. the building development approval for the construction of the building was not given under the building assessment provisions in force immediately before 1 September 2010, under section 37 of the *Building Act 1975*.

**Relocated building** see section 7 of Queensland Development Code Mandatory Part 4.4: Buildings in a Transport Noise Corridor.

Note: A building is a **relocated building** if the building:

- 1. is a class 1, 2, 3 or 4 building
- 2. was constructed on an allotment (the first allotment) where it was used as a residence
- 3. is relocated from:
  - a. the first allotment to another allotment; or
  - b. a site on the first allotment to another site on the first allotment.

**Retaining structures** means retention **structures** and systems such as walls, batters, anchors, bolts, soil nails, shoring, piles, piers, beams and similar **structures**.

Structure means any built structure as well as retaining structures.

**Transport noise corridor** means land designated under chapter 8B of the *Building Act 1975* as a transport noise corridor.

**Type 2 multi-modal corridor** means a transport corridor that includes a **railway** (with 15 or more passing trains per day) and at least one of the following:

- 1. a state-controlled road; or
- a busway; or
- 3. light rail.

## 2.5 Abbreviations

RPEQ - Registered Professional Engineer of Queensland

# State code 3: Development in a busway environment

## 3.1 Purpose statement

The purpose of this code is to protect **busways**, future **busways** and other infrastructure in a **busway corridor** from adverse impacts of development. The purpose of this code is also to protect the safety of people using, and living and working near, **busways**.

Specifically, this code seeks to ensure:

- 1. development does not create a safety hazard for users of a **busway**, by increasing the likelihood or frequency of fatality or serious injury
- 2. development does not compromise the structural integrity of a **busway**, **busway transport infrastructure** or **busway transport infrastructure works**
- 3. development does not compromise the state's ability to construct **busways** and future **busways**, or significantly increase the cost to construct **busways** and future **busways**
- 4. development does not compromise the state's ability to maintain and operate **busways**, or significantly increase the cost to maintain and operate **busways**
- 5. the community is protected from significant adverse impacts resulting from environmental emissions generated by **busways**.

# 3.2 Performance outcomes and acceptable outcomes

Development in a **busway** environment should demonstrate compliance with the relevant provisions of table 3.2.1 and table 3.2.2.

Development in a future **busway** environment should demonstrate compliance with the relevant provisions of table 3.2.3.

Table 3.2.1: Development in a busway environment

Performance outcomes	Acceptable outcomes
Buildings and structures	
PO1 The location of buildings, structures,	AO1.1 Buildings, structures, infrastructure, services
infrastructure, services and utilities does not create a	and utilities are not located in a <b>busway corridor</b> .
safety hazard in a <b>busway corridor</b> or cause	
damage to, or obstruct busway transport	AND
infrastructure.	
Note: Section 3.1 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads 2017, provides further guidance on how to comply with this performance outcome.	<b>AO1.2</b> Buildings, <b>structures</b> , infrastructure, services and utilities can be maintained without requiring access to a <b>busway corridor</b> .
PO2 Development does not add or remove loading	No acceptable outcome is prescribed.
that will cause damage to <b>bus transport</b>	·
infrastructure or a busway corridor.	
Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.	
Section 3.1 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads 2017, provides further guidance on how to comply with this performance outcome.	

Performance outcomes	Acceptable outcomes
Post Road, pedestrian and bikeway bridges over a	AO3.1 Road, pedestrian and bikeway bridges
busway corridor are designed and constructed to	include throw protection screens in accordance with
prevent projectiles from being thrown onto a	section 4.9.3 of the Design Criteria for Bridges and
busway.	Other Structures Manual, Department of Transport
busway.	and Main Roads, 2014.
Note: Section 3.1 of the Interim Guide to Development in a	and Main Roads, 2014.
Transport Environment: Busway, Department of Transport and	
Main Roads 2017, provides further guidance on how to comply with this performance outcome.	
PO4 Construction activities not cause ground	No acceptable outcome is prescribed.
movement or vibration impacts in a <b>busway</b>	No acceptable outcome is prescribed.
corridor.	
oomdon.	
Note: To demonstrate compliance with this performance outcome,	
it is recommended a RPEQ certified geotechnical assessment is	
provided.	
Section 2.2 of the Interim Cuide to Development in a Transport	
Section 3.2 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads	
2017, provides further guidance on how to comply with this	
performance outcome.	
Filling, excavation and retaining structures	
PO5 Filling, excavation and retaining structures do	No acceptable outcome is prescribed.
not interfere with, or result in damage to,	
infrastructure or services in a <b>busway corridor</b> .	
Note: Information on the location of services and public utilities in a <b>busway</b> can be obtained from the 'Dial Before You Dig' service.	
Where development will impact on a service or public utility plant	
in a <b>busway corridor</b> , such that the service or public utility plant	
will need to be relocated, an applicant should contact the relevant	
service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of	
relocation are to be borne by the developer.	
Tologanon are to so some sy the developen	
Section 3.2 of the Interim Guide to Development in a Transport	
Environment: Busway, Department of Transport and Main Roads 2017, provides further guidance on how to comply with this	
performance outcome.	
PO6 Filling, excavation, building foundations and	No acceptable outcome is prescribed.
retaining structures do not undermine or cause	· ·
subsidence of, a <b>busway corridor</b> .	
•	
Note: To demonstrate compliance with this performance outcome,	
it is recommended a RPEQ certified geotechnical assessment is	
provided.	
Section 3.2 of the Interim Guide to Development in a Transport	
Environment: Busway, Department of Transport and Main Roads	
2017, provides further guidance on how to comply with this	
performance outcome.	No acceptable suitagms is prescribed
PO7 Filling, excavation, building foundations and	No acceptable outcome is prescribed.
retaining structures do not cause ground water	
disturbance in a <b>busway corridor</b> .	
Note: To demonstrate compliance with this performance outcome,	
it is recommended an RPEQ certified geotechnical assessment is	
provided.	
Operation of Operation Leading Co. 11 of Do. 11 of T.	
Section 3.2 of the Interim Guide to Development in a Transport	
Environment: Busway, Department of Transport and Main Roads 2017, provides further guidance on how to comply with this	
performance outcome.	
PO8 Excavation, boring, piling, blasting or fill	No acceptable outcome is prescribed.
compaction during construction of a development	, ,
does not result in ground movement or vibration	
2222 growing moromone of vibration	<u> </u>

Performance outcomes	Acceptable outcomes
impacts that would cause damage or nuisance to	71000 510001100
busway transport infrastructure or busway	
transport infrastructure works.	
Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.	
Section 3.2 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads 2017, provides further guidance on how to comply with this performance outcome.	
<b>PO9</b> Filling and excavation material does not cause an obstruction or nuisance in a <b>busway corridor</b> .	<b>AO9.1</b> Development does not store fill, spoil or any other material in, or adjacent to, a <b>busway corridor</b> .
Note: Section 3.2 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads 2017, provides further guidance on how to comply with this performance outcome.	
<b>PO10</b> Filling and excavation does not cause windblown dust nuisance in a <b>busway corridor</b> .	AO10.1 Compaction of fill is carried out in accordance with the requirements of AS1289.0 2000 – Methods of testing soils for engineering purposes.
	AND
	AO10.2 Dust suppression measures are used during filling and excavation activities such as wind breaks or barriers and dampening of ground surfaces.
Stormwater and drainage	
PO11 Development does not result in an actionable	No acceptable outcome is prescribed.
<b>nuisance</b> or worsening of stormwater, flooding or drainage impacts in a <b>busway corridor</b> .	
Note: Section 3.3 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.	
<b>PO12</b> Run-off from the development site during construction of development does not cause siltation of stormwater infrastructure affecting a <b>busway</b> .	AO12.1 Run-off from the development site during construction of development is not discharged to stormwater infrastructure for a busway.
Note: Section 3.3 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.	
Access	
<b>PO13</b> Development prevents unauthorised access to a <b>busway corridor</b> .	<b>AO13.1</b> Where development is abutting a <b>busway corridor</b> , a fence is provided along the property boundary in accordance with clause 4.1.6 of the
Note: Section 3.4 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.	Guide to Road Design Part 6B, Austroads 2015 and Part 6B of the Road Planning and Design Manual, 2 <sup>nd</sup> edition, Department of Transport and Main Roads, 2016.
<b>PO14</b> Vehicular access for a development does not create a safety hazard or result in worsening of operating conditions on <b>busways</b> .	No acceptable outcome is prescribed.
Note: Section 3.4 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.	

#### Performance outcomes

PO15 Development does not damage or interfere with public passenger transport infrastructure, public passenger services or pedestrian and cycle access to public passenger transport infrastructure and public passenger services.

Note: Section 3.5 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.

#### Acceptable outcomes

**AO15.1** Vehicular access and associated road access works are not located within 5 metres of **public passenger transport infrastructure**.

AND

**AO15.2** Development does not necessitate the relocation of existing **public passenger transport infrastructure**.

AND

AO15.3 On-site vehicle circulation is designed to give priority to entering vehicles at all times so vehicles using a vehicular access do not obstruct public passenger transport infrastructure and public passenger services or obstruct pedestrian or cycle access to public passenger transport infrastructure and public passenger services.

AND

**AO15.4** The normal operation of **public passenger transport infrastructure** or **public passenger services** is not interrupted during construction of the development.

#### Planned upgrades

PO16 Development does not impede delivery of planned upgrades of busway transport infrastructure.

Note: Section 3.6 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.

**AO16.1** Development is not located on land identified by Department of Transport and Main Roads as land required for the **planned upgrade** of **busway transport infrastructure**.

Note: Land required for the **planned upgrade** of **busway transport infrastructure** is identified in the **DA mapping system**.

OR

**AO16.2** Development is sited and designed so that permanent buildings, **structures**, infrastructure, services or utilities are not located on land identified by the Department of Transport and Main Roads as land required for the **planned upgrade** of **busway transport infrastructure**.

OR all of the following acceptable outcomes apply:

AO16.3 Structures and infrastructure located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a busway transport infrastructure are able to be readily relocated or removed without materially affecting the viability or functionality of the development.

AND

**AO16.4** Development does not involve filling and excavation of, or material changes to, land required

Performance outcomes	Acceptable outcomes
	for a planned upgrade to busway transport infrastructure.
	AND
	AO16.5 Land is able to be reinstated to the pre- development condition at the completion of the use.

#### Table 3.2.2: Environmental emissions

Note: Where a **busway** is co-located in the same transport corridor as a state-controlled road, development should instead comply with table 1.2.2 Environmental emissions of State code 1: Development in a state-controlled road environment.

Where a **busway** is co-located in the same transport corridor as a railway, development should instead comply with table 2.2.2 Environmental emissions of State code 2: Development in a railway environment.

Refer to sections 3.7, 3.8 and 3.9 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, for further guidance on how to comply with the performance outcomes in table 3.2.2.

Performance outcomes	Acceptable outcomes
Noise	
Accommodation activities	
PO17 Development involving:  1. an accommodation activity; or  2. land for a future accommodation activity minimises noise intrusion from a busway in habitable rooms.	AO17.1 A noise barrier or earth mound is provided which is design, sited and constructed:  1. to meet the following external noise criteria at all facades of the building envelope:  a. ≤55 dB(A) Leq (1 hour) façade corrected (maximum hour between 6 am and 10 pm)  b. ≤50 dB(A) Leq (1 hour) façade corrected (maximum hour between 10 pm and 6 am)  c. ≤64 dB(A) Lmax façade corrected (between 10pm and 6am)  2. in accordance with chapter 7 − Integrated noise barrier design of the Transport Noise Management Code of Practice − Volume 1 Road Traffic Noise, Department of Transport and Main Roads, 2013.  Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment is provided, prepared in accordance with section 3.7 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017.  If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used.  In some instances, the design of noise barriers and mounds to achieve the noise criteria above the ground floor may not be reasonable or practicable. In these instances, any relaxation of the criteria is at the discretion of the Department of Transport and Main Roads.  OR all of the following acceptable outcomes apply:  AO17.2 Buildings which include a habitable room are setback the maximum distance possible from a busway.

Derformence cutoemes	Assentable syteemes
Performance outcomes	Acceptable outcomes
	AO17.3 Buildings are designed and oriented so that
	habitable rooms are located furthest from a
	busway.
	AND
	AO17.4 Buildings are designed and constructed
	using materials which ensure that habitable rooms
	meet the following internal noise criteria:
	1. ≤35 dB(A) L <sub>eq</sub> (1 hour) (maximum hour over 24
	hours).
	Hours).
	Note: Noise levels from a <b>busway</b> are to be measured in
	accordance with AS1055.1–1997 Acoustics – Description and
	measurement of environmental noise.
	To demonstrate compliance with the acceptable outcome, it is
	recommended that a RPEQ certified noise assessment report is
	provided, prepared in accordance with section 3.7 of the Interim Guide to Development in a Transport Environment: Busway,
	Department of Transport and Main Roads, 2017.
PO18 Development involving an accommodation	AO18.1 A noise barrier or earth mound is provided
activity minimises noise intrusion from a busway in	which is design, sited and constructed:
outdoor spaces for passive recreation.	to meet the following external noise criteria in
outdoor spaces for passive recreation.	outdoor spaces for passive recreation:
	a. ≤52 dB(A) L <sub>eq</sub> (1 hour) free field (maximum
	hour between 6 am and 10 pm)
	b. ≤66 dB(A) L <sub>max</sub> free field
	2. in accordance with chapter 7 – Integrated noise
	barrier design of the Transport Noise
	Management Code of Practice – Volume 1
	Road Traffic Noise, Department of Transport
	and Main Roads, 2013.
	Note: To demonstrate compliance with the acceptable outcome, it
	is recommended that a RPEQ certified noise assessment is provided, prepared in accordance with section 3.7 of the Interim
	Guide to Development in a Transport Environment: Busway,
	Department of Transport and Main Roads, 2017.
	OR
	AO18.2 Each dwelling has access to an outdoor
	space for passive recreation which is shielded
	from a <b>busway</b> by a building, a solid gap-free fence,
	or other solid gap-free <b>structure</b> .
	AND
	AND
	AO18 3 Fach dwelling with a halcony directly
	AO18.3 Each dwelling with a balcony directly
	exposed to noise from a <b>busway</b> has a continuous
	solid gap-free balustrade (other than gaps required
	for drainage purposes to comply with the Building
Obildone control on to breath a total	Code of Australia).
Childcare centres and educational establishments	
PO19 Development involving a:	AO19.1 A noise barrier or earth mound is provided
1. childcare centre; or	which is designed, sited and constructed:
2 educational establishment	to meet the following external noise criteria at
minimises noise intrusion from a busway in indoor	the building envelope:
education areas and indoor play areas.	

Performance outcomes	Acceptable outcomes
	a. ≤55 dB(A) L <sub>eq</sub> (1 hour) façade corrected (maximum hour during normal opening
	hours)  2. in accordance with chapter 7 – Integrated noise
	barrier design of the Transport Noise
	Management Code of Practice – Volume 1
	Road Traffic Noise, Department of Transport and Main Roads, 2013.
	and Main Roads, 2013.
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with section 3.7 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017
	If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used.
	OR all of the following acceptable outcomes apply:
	AO19.2 Buildings which include indoor education areas and indoor play areas are setback the maximum distance possible from a busway.
	AND
	AO19.3 Buildings are designed and oriented so that indoor education areas and indoor play areas are located furthest from the busway.
	AND
	<ul> <li>AO19.4 Buildings are designed and constructed using materials which ensure indoor education areas and indoor play areas meet the following internal noise criteria:</li> <li>1. ≤35 dB(A) L<sub>eq</sub> (1 hour) (maximum hour during opening hours).</li> </ul>
	Note: Noise levels from a <b>busway</b> are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise.
	To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with section 3.7 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017.
PO20 Development involving a:	AO20.1 A noise barrier or earth mound is provided
childcare centre; or     educational establishment	which is design, sited and constructed:  1. to meet the following external noise criteria in
minimises noise intrusion from a busway in outdoor	outdoor education areas and outdoor play
education areas and outdoor play areas.	areas:
	<ul> <li>a. ≤52 dB(A) L<sub>eq</sub> (1 hour) free field (maximum hour during normal opening hours)</li> </ul>
	b. ≤66 dB(A) L <sub>max</sub> free field (during normal
	opening hours)
	in accordance with chapter 7 – Integrated noise barrier design of the Transport Noise
	Management Code of Practice – Volume 1

Performance outcomes	Acceptable outcomes
T GHOTHUNGC OUTGOINGS	Road Traffic Noise, Department of Transport
	and Main Roads, 2013.
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment is provided, prepared in accordance with section 3.7 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017.
	OR
	AO20.2 Each outdoor education area and outdoor play area is shielded from noise generated from a busway by a building, a solid gap-free fence, or other solid gap-free structure.
Hospitals	A COM A Harry Yellow and Large and Large Annual Company
PO21 Development involving a hospital minimises noise intrusion from a busway in patient care areas.	<ul> <li>AO21.1 Hospitals are designed and constructed using materials which ensure patient care areas meet the following internal noise criteria:</li> <li>1. ≤35 dB(A) Leq (1 hour) (maximum hour during opening hours).</li> </ul>
	Note: Noise levels from a <b>busway</b> are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise.
	To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with section 3.7 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017.
Vibration	
PO22 Development involving a hospital minimises vibration impacts from a busway in patient care areas.	<b>AO22.1 Hospitals</b> are designed and constructed to ensure vibration in the treatment area of a <b>patient care area</b> does not exceed a vibration dose value of 0.1m/s <sup>1.75</sup> .
	AND
	<b>AO22.2 Hospitals</b> are designed and constructed to ensure vibration in the ward area of a <b>patient care area</b> does not exceed a vibration dose value of 0.4m/s <sup>1.75</sup> .
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified vibration assessment
	report is provided.
Air and light	report is provided.
PO23 Development involving an accommodation activity minimises air quality impacts from a busway in outdoor spaces for passive recreation.	AO23.1 Each dwelling has access to an outdoor space for passive recreation which is shielded from a busway by a building, a solid gap-free fence, or other solid gap-free structure.
PO23 Development involving an accommodation activity minimises air quality impacts from a busway in outdoor spaces for passive	AO23.1 Each dwelling has access to an outdoor space for passive recreation which is shielded from a busway by a building, a solid gap-free fence,

Performance outcomes	Acceptable outcomes
	windows or transparent/translucent panels facing a <b>busway</b> .
	OR
	AO25.2 Windows facing a busway include treatments to block light from a busway.

	treatments to block light from a <b>busway</b> .
able 3.2.3: Development in a future busway environment	
Performance outcomes	Acceptable outcomes
PO26 Development does not impede delivery of busway transport infrastructure in a future busway corridor.	AO26.1 Development is not located in a future busway corridor.
Note: Section 3.6 of the Interim Guide to Development in a	OR
Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.	AO26.2 Development is sited and designed so that permanent buildings, <b>structures</b> , infrastructure, services or utilities are not located in a <b>future busway corridor</b> .
	OR all of the following acceptable outcomes apply:
	AO26.3 Structures and infrastructure located in a future busway corridor are able to be readily relocated or removed without materially affecting the viability or functionality of the development.
	AND
	AO26.4 Development does not involve filling and excavation of, or material changes to, a future busway corridor.
	AND
	AO26.5 Land is able to be reinstated to the predevelopment condition at the completion of the use.
<b>PO27</b> Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of a future busway corridor.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended that an RPEQ certified geotechnical assessment is provided.	
Section 3.2 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.	
PO28 Fill material from a development site does not result in contamination of land for a <b>future busway</b>	AO28.1 Fill material is free of contaminants including acid sulfate content.
Corridor.  Note: Section 3.2 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.	Note: Soil and rocks should be tested in accordance with AS1289 – Methods of testing soils for engineering purposes and AS4133 2005 – Methods of testing rocks for engineering purposes.
with this performance outcome.	AND
	AO28.2 Compaction of fill is carried out in accordance with the requirements of AS 1289.0

Performance outcomes	Acceptable outcomes
	2000 – Methods of testing soils for engineering
	purposes.
<b>PO29</b> Development does not result in an <b>actionable nuisance</b> , or worsening of, stormwater, flooding or drainage impacts in a <b>future busway corridor</b> .	No acceptable outcome is prescribed.
Note: Section 3.3 of the Interim Guide to Development in a Transport Environment: Busway, Department of Transport and Main Roads, 2017, provides further guidance on how to comply with this performance outcome.	

## 3.3 Reference documents

Austroads 2015, Guide to Road Design Part 6B: Roadside Environment

Department of Transport and Main Roads 2013, Transport Noise Management Code of Practice – Volume 1: Road Traffic Noise

Department of Transport and Main Roads 2014, Design criteria for bridges and other structures

Department of Transport and Main Roads 2015, Road drainage manual

Department of Transport and Main Roads 2016, Road Planning and Design Manual 2nd edition: Volume 3

Department of Transport and Main Roads 2016, Transport Noise Management Code of Practice: Volume 2: Construction Noise and Vibration

Department of Transport and Main Roads 2017, Interim Guide to Development in a Transport Environment: Busway.

Department of Energy and Water Supply 2013, Queensland Urban Drainage Manual

International Erosion Control Association Australasia, Best Practice Erosion and Sediment Control document

Standards Australia 1997, AS1055.1-1997 Acoustics - Description and measurement of environmental noise

Standards Australia 2000, AS1289.0–2000 – Methods of testing soils for engineering purposes

## 3.4 Glossary of terms

Accommodation activity means any of the following:

- 1. caretaker's accommodation
- 2. community residence
- 3. dual occupancy
- 4. dwelling house
- 5. dwelling unit
- 6. multiple dwelling
- 7. relocatable home park
- 8. residential care facility
- 9. resort complex
- 10. retirement facility
- 11. rooming accommodation
- 12. short-term accommodation
- 13. tourist park
- 14. a development with a combination of uses 1 to 13.

**Actionable nuisance** means where stormwater or surface water drainage to a downstream property causes a loss of enjoyment of property or physical damage to property (termed 'nuisance') such that the nuisance is actionable in law.

Note: See the Queensland Urban Drainage Manual, Department of Energy and Water Supply, 2016 for further information.

#### **Busway** see schedule 6 of the Transport Infrastructure Act 1994.

Note: Busway means:

- 1. a route especially designed and constructed for, and dedicated to, the priority movement of buses for passenger transport purposes
- 2. places for the taking on and letting off of bus passengers using the route.

#### Busway corridor means land on which:

- 1. busway transport infrastructure is situated; or
- 2. busway transport infrastructure works are being done; or
- 3. other services are provided for the maintenance or operation of busway transport infrastructure.

#### Busway transport infrastructure see schedule 6 of the Transport Infrastructure Act 1994.

Note: Busway transport infrastructure means each of the following:

- 1. the pavement on which buses run for a **busway**
- 2. the stations for operating a busway
- 3. other facilities necessary for managing or operating a **busway**, including for example:
  - a. infrastructure put in place for the **busway**, including the following:
    - i. support earthworks
    - ii. cuttings
    - iii. drainage works
    - iv. excavations
    - v. land fill
  - o. the following things, if associated with the operation of the busway:
    - i. access or service lanes
    - ii. bridges, including bridges over water
    - iii. busway operation control facilities
    - iv. communication systems
    - v. depots
    - vi. machinery and other equipment
  - vii. monitoring and security systems
  - viii. noise barriers
  - ix. notice boards, notice markers and signs
  - x. office buildings
  - xi. passenger interchange facilities between the **busway** and other modes of transport
  - xii. platforms
  - xiii. positioning systems
  - xiv. power and communication cables
  - xv. signalling facilities and equipment
  - xvi. survey stations, pegs and marks
  - xvii. ticketing equipment and systems
  - xviii. timetabling systems
  - xix. tunnels
  - xx. under-busway structures
  - xxi. workshops.
- 4. vehicle parking vehicle parking and set down facilities for intending passengers for a busway
- 5. pedestrian facilities, including paving of footpaths, for a busway
- 6. other facilities, or commercial or retail outlets or works, for the convenience of passengers and others who may use a **busway**, including, for example, automatic teller machines, lockers or showers for cyclists and others, newsagents and wheelchair hire or exchange centres
- 7. landscaping or associated works for a busway.

#### Busway transport infrastructure works see schedule 6 of the Transport Infrastructure Act 1994.

Note: Busway transport infrastructure works means works done for:

- 1. constructing busway transport infrastructure or things associated with busway transport infrastructure; or
- 2. the maintenance of busway transport infrastructure or of things associated with busway transport infrastructure; or
- facilitating the operation of busway transport infrastructure or things associated with busway transport infrastructure; or
   establishing, constructing or maintaining transport infrastructure, other than busway transport infrastructure, if the works are:
  - a. directly related to an activity mentioned in paragraph 1, 2 or 3; and
  - b. necessary for the safety, efficiency and operational integrity of transport infrastructure; or
- 5. other works declared under a regulation to be busway transport infrastructure works.

#### Childcare centre see schedule 24 of the Planning Regulation 2017.

Note: Childcare centre means the premises used for care, education and minding, but not residence, of children.

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA mapping system** is available on the department's website.

#### Educational establishment see schedule 24 of the Planning Regulation 2017.

Note: Educational establishment means the use of premises for:

- 1. training and instruction to impart knowledge and develop skills; or
- 2. student accommodation, before or after school care, or vacation care, if the use is ancillary to the use in paragraph 1.

**Future busway corridor** means land identified in a guideline made under section 8E of the *Transport Planning and Coordination Act 1994*, for **busway transport infrastructure** or **busway transport infrastructure works**.

Note: See the DA mapping system.

#### Habitable room see the Building Code of Australia.

Note: **Habitable room** means a room used for normal domestic activities, and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom but excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

#### Hospital see schedule 24 the Planning Regulation 2017.

Note: Hospital means the use of premises for:

the medical or surgical care or treatment of patients, whether or not the care or treatment requires overnight accommodation; or

- 1. providing accommodation for patients; or
- 2. providing accommodation for employees, or any other use, if the use is ancillary to the use in paragraphs 1 or 2.

**Indoor education area** means an enclosed area within a **childcare centre** or **educational establishment** intended for use for the training or teaching of people including a classroom, lecture hall/theatre and library.

**Indoor play area** means an enclosed area within a **childcare centre** or **educational establishment** intended for use for children's play. This term excludes functional areas such as bathrooms, food preparation areas, washing facilities and other spaces of a specialised nature.

**Loading** means pressure or force exerted on land of infrastructure.

**Outdoor education area** means outdoor areas intended for use for the training or teaching of persons. This term does not include playgrounds or outdoor sport and recreational areas.

#### Outdoor play area see the Queensland Development Code.

Note: **Outdoor play area** means an unenclosed area located outside the external walls of the building. This term only includes playgrounds/play areas in a **childcare centre** or **educational establishment**.

Outdoor space for passive recreation means private open space, communal open space or public open space.

#### Patient care area see the Building Code of Australia.

Note: **Patient care area** means a part of a health-care building normally used for the treatment, care, accommodation, recreation, dining and holding of patients including a ward area and treatment area. A ward area means that part of a **patient care area** for resident patients and may contain areas for accommodation, sleeping, associated living and nursing facilities. A treatment area means an area within a **patient care area** such as an operating theatre and rooms used for recovery, minor procedures, resuscitation, intensive care and coronary care from which a patient may not be readily moved.

**Planned upgrade** means an extension, upgrade, or duplication of state transport infrastructure or transport networks for which affected land has been identified:

- 1. in a publicly available government document; or
- 2 in written advice to affected land owners

Note: Government documents are Commonwealth, state or local government documents that include a statement of intent for, or a commitment to, a planning outcome or infrastructure provision. See the **DA mapping system**.

**Public passenger service** see schedule 3 of the *Transport Operations (Passenger Transport) Act 1994.* Note: **Public passenger service** means a service for the carriage of passengers if:

- 1. the service is provided for fare or other consideration; or
- 2. the service is provided in the course of a trade or business (but not if it is provided by an employer solely for employees); or

- 3. the service is a courtesy or community transport service; and
- 4. includes a driver service and a service for the administration of taxi services but does not include a service excluded from the *Transport Operations (Passenger Transport) Act 1994* by a regulation.

# **Public passenger transport infrastructure** see schedule 1 of the *Transport Planning and Coordination Act* 1994.

Note: **Public passenger transport infrastructure** means infrastructure for, or associated with, the provision of public passenger transport, including, but not limited to:

- 1. a transit terminal for public passenger services (for example, an airport terminal, a coach terminal, a cruise ship terminal)
- 2. a ferry terminal, jetty, pontoon or landing for ferry services
- 3. a bus stop, bus shelter, bus station or bus lay-by
- 4. a **busway** station
- a light rail station
- 6. a taxi rank, limousine rank or limousine standing area
- 7. a railway station
- 8. vehicle parking and set-down facilities
- 9. pedestrian and bicycle paths and bicycle facilities
- 10. a road on which a public passenger transport service operates.

Private open space means an outdoor space for the exclusive use of occupants of a building.

**Retaining structures** means retention **structures** and systems such as walls, anchors, bolts, soil nails, shoring, piles, piers, beams.

Structure means any built structure as well as retaining structures.

## 3.5 Abbreviations

dB(A) – decibels measured on the 'A' frequency weighting network

RPEQ - Registered Professional Engineer of Queensland

# State code 4: Development in a light rail environment

## 4.1 Purpose statement

The purpose of this code is to protect **light rail**, future **light rail** and other infrastructure in a **light rail corridor**, from adverse impacts of development. The purpose of this code is also to protect the safety of people using, and living and working near, **light rail**.

Specifically, this code seeks to ensure:

- 1. development does not create a safety hazard for users of a **light rail** by increasing the likelihood or frequency of fatality or serious injury
- 2. development does not compromise the structural integrity of **light rail**, **light rail transport infrastructure** or **light rail transport infrastructure works**
- 3. development does not result in a worsening of the physical condition or operating performance of **light**
- 4. development does not compromise the state's ability to construct **light rail** and future **light rail**, or significantly increase the cost to construct **light rail** and future **light rail**
- 5. development does not compromise the state's ability to maintain and operate **light rail**, or significantly increase the cost to maintain and operate **light rail**
- 6. the community is protected from significant adverse impacts resulting from environmental emissions generated by a **light rail**.

# 4.2 Performance outcomes and acceptable outcomes

Development that is within in a **light rail** environment should demonstrate compliance with the relevant provisions of table 4.2.1 and table 4.2.2.

Development that is within a future **light rail** environment should demonstrate compliance with the relevant provisions of table 4.2.3.

Table 4.2.1: All development in a light rail environment

Performance outcomes	Acceptable outcomes
Buildings and structures	
<b>PO1</b> The location of buildings, <b>structures</b> , infrastructure, services and utilities does not create a safety hazard in a <b>light rail corridor</b> or cause	<b>AO1.1</b> Buildings, <b>structures</b> , infrastructure services and utilities are not located in a <b>light rail corridor</b> .
damage to, or obstruct, light rail transport infrastructure.	AND
Note: Section 2.1 of the Interim Guide to Development in a Transport Environment: Light rail, Department of Transport and Main Roads, 2017, provides guidance on how to comply with this performance outcome.	AO1.2 Buildings, structures, infrastructure, services and utilities can be maintained without requiring access to a light rail corridor.  AND
	AO1.3 Buildings, structures and infrastructure are set back horizontally a minimum of 3 metres from the outermost projection of overhead line equipment.

Performance outcomes	Acceptable outcomes
	AND
	AND
	AO1.4 Vegetation is set back horizontally a minimum of 1 metre from the light rail hazard zone and does not exceed 5 metres in height at maturity.
	AND
	AO1.5 Construction activities do not encroach into a light rail hazard zone.
	AND
	AO1.6 Construction activities do not divert vehicle, pedestrian or cycle traffic into the <b>light rail hazard</b> zone.
PO2 Buildings and structures are designed and constructed to not create a safety hazard by distracting drivers of light rail vehicles.	AO2.1 Facades of buildings and structures facing a light rail corridor are made of non-reflective materials.
	OR
	AO2.2 Facades of buildings and structures do not reflect point light sources into the face of oncoming light rail vehicles.
	AND
	AO2.3 External lighting of buildings and structures is not directed into the face of oncoming light rail vehicles and does not involve flashing or laser lights.
PO3 Development does not add or remove loading	No acceptable outcome is prescribed.
that will cause damage to light rail transport infrastructure or a light rail corridor.	
Note: To demonstrate compliance with this performance outcome, it is recommended a Registered Professional Engineer of Queensland (RPEQ) certified geotechnical assessment is provided.	
<b>PO4</b> Road, pedestrian and bikeway bridges over a <b>light rail corridor</b> are designed and constructed to prevent projectiles from being thrown onto <b>light rail</b> .	AO4.1 Road, pedestrian and bikeway bridges include throw protection screens in accordance with Civil Engineering Technical Requirement CIVIL-SR-008 – Protection screens, Queensland Rail.
PO5 Construction activities do not cause ground movement or vibration impacts in a light rail corridor.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is prepared.	
Filling, excavation and retaining structures	
<b>PO6</b> Filling, excavation and <b>retaining structures</b> do not interfere with, or result in damage to, infrastructure or services in a <b>light rail corridor</b> .	No acceptable outcome is prescribed.

Performance outcomes	Acceptable outcomes
Note: Information on the location of services and public utility plants in a <b>light rail corridor</b> can be obtained from the 'Dial Before You Dig' service.	
Where development will impact on an existing or future service or public utility plant in a <b>light rail corridor</b> such that the service or public utility plant will need to be relocated, the alternative alignment must comply with the standards and design specifications of the relevant service or public utility provider, and any costs of relocation are to be borne by the developer.	
<b>PO7</b> Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of, a <b>light rail corridor</b> .	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended an RPEQ certified geotechnical assessment is provided.	
Section 2.2 of the Interim Guide to Development in a Transport Environment: Light rail, Department of Transport and Main Roads, 2017 provides guidance on how to comply with this performance outcome.	
<b>PO8</b> Filling and excavation, building foundations and retaining structures do not cause ground water disturbance in a <b>light rail corridor</b> .	No acceptable solution is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended an RPEQ certified geotechnical assessment is provided.	
PO9 Excavation, boring, piling, blasting or fill compaction during construction of a development does not result in ground movement or vibration impacts that would cause damage or nuisance to light rail transport infrastructure or light rail transport infrastructure works.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended an RPEQ certified geotechnical assessment is provided. Section 2.2 of the Interim Guide to Development in a Transport Environment: Light rail, Department of Transport and Main Roads, 2017 provides guidance on how to comply with this performance outcome.	
<b>PO10</b> Fill material from a development site does not result in contamination of a <b>light rail corridor</b> .	AO10.1 Fill material is free of contaminants including acid sulfate content.
	Note: Soil and rocks should be tested in accordance with AS 1289 – Methods of testing soils for engineering purposes and AS 4133-2005 – Methods of testing rocks for engineering purposes.
	AND
	AO10.2 Compaction of fill is carried out in accordance with the requirements of AS 1289.0 2000 – Methods of testing soils for engineering purposes.
<b>PO11</b> Filling and excavation does not cause windblown dust nuisance in a <b>light rail corridor</b> .	AO11.1 Compaction of fill is carried out in accordance with the requirements of AS 1289.0 2000 – Methods of testing soils for engineering purposes.
	AND

Performance outcomes	Acceptable outcomes
	<b>AO11.2</b> Dust suppression measures are used during filling and excavation activities such as wind breaks or barriers and dampening of ground surfaces.
Stormwater and drainage	
PO12 Development does not result in an actionable nuisance or worsening of stormwater, flooding or drainage impacts in a light rail corridor.  Note: Section 2.3 of the Interim Guide to Development in a	No acceptable outcome is prescribed.
Transport Environment: Light rail, Department of Transport and Main Roads, 2017 provides guidance on how to comply with this performance outcome.	
<b>PO13</b> Run-off from the development site during construction of development does not cause siltation of stormwater infrastructure affecting a <b>light rail corridor</b> .	<b>AO13.1</b> Run-off from the development site during construction is not discharged to stormwater infrastructure for a <b>light rail corridor</b> .
Access	
<b>PO14</b> Vehicular access for a development does not create a safety hazard for <b>light rail transport infrastructure</b> or result in a worsening of operating conditions for the <b>light rail</b> .	AO14.1 Development does not involve new or changed access between the premises and the light rail corridor.
Note: Section 2.4 of the Interim Guide to Development in a Transport Environment: Light rail, Department of Transport and Main Roads, 2017 provides guidance on how to comply with this performance outcome.	Note: Where a new or changed access between the premises and a <b>light rail corridor</b> is proposed, the proposal will need to be assessed to determine if the vehicular access for the development is safe and whether the access will adversely affect public passenger transport services. Further information regarding design requirements for vehicular access can be found in the draft Guide for Development in a Transport Environment: Light rail, Department of Transport and Main Roads, 2017.
	OR
	<b>AO14.2</b> Where a property directly abuts a road within the <b>light rail corridor</b> , vehicular access is configured for left in and left out turning movements only.
	AND
	<b>AO14.3</b> On-site vehicle circulation is designed to give priority to entering vehicles at all times to ensure movement of <b>light rail vehicles</b> is not impeded by an overflow of traffic queuing to enter the premises.
PO15 Development does not damage or interfere with public passenger transport infrastructure, public passenger services or pedestrian and cycle access to public passenger transport infrastructure and public passenger services.	AO15.1 Vehicular access and associated road access works for a development are not located within 5 metres of existing public passenger transport infrastructure.
Note: Section 2.5 of the Interim Guide to Development in a Transport Environment: Light rail, Department of Transport and Main Roads, 2017, provides guidance on how to comply with this performance outcome.	AND  AO15.2 Development does not necessitate the relocation of existing public passenger transport infrastructure.
	AND

Performance outcomes	Acceptable outcomes
	AO15.3 On-site vehicle circulation is designed to give priority to entering vehicles at all times so vehicles using a vehicular access do not obstruct public passenger transport infrastructure, public passenger services and pedestrian or cycle access to public passenger transport infrastructure and public passenger services.
	AND
	AO15.4 The normal operation of public passenger transport infrastructure or public passenger services is not interrupted during the construction of the development.
Planned upgrades	
PO16 Development does not impede delivery of planned upgrades of light rail transport infrastructure.	AO16.1 Development is not located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of light rail transport infrastructure.
	Note: Land required for the planned upgrade of light rail transport infrastructure is identified in the DA mapping system.
	OR
	AO16.2 Development is sited and designed so that permanent buildings, <b>structures</b> , infrastructure, services or utilities are not located on land identified by the Department of Transport and Main Roads as land required for the <b>planned upgrade</b> of <b>light rail transport infrastructure</b> .
	OR all of the following acceptable outcomes apply:
	AO16.3 Structures and infrastructure located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of a of light rail transport infrastructure are able to be readily relocated or removed without materially affecting the viability or functionality of the development.
	AND
	AO16.4 Development does not involve filling and excavation of, or material changes to, land required for a planned upgrade of light rail transport infrastructure.
	AND
	AO16.5 Land is able to be reinstated to the pre- development condition at the completion of the use.

#### Table 4.2.2: Environmental emissions

Statutory note: Where a **light rail** is co-located in the same transport corridor as a state-controlled road, development should instead comply with table 1.2.2 Environmental emissions of State code 1: Development in a state-controlled road environment.

Where a **light rail** is co-located in the same transport corridor as a railway, development should instead comply with table 2.2.2 Environmental emissions of State code 2: Development in a railway environment.

#### **Acceptable outcomes Performance outcomes Noise Accommodation activities** AO17.1 A noise barrier or earth mound is provided **PO17** Development involving: 1. an accommodation activity; or that is designed, sited and constructed: land for a future accommodation activity 1. to meet the following external noise criteria at all minimises noise intrusion from a light rail in facades of the building envelope: a. ≤55 dB(A) L<sub>eq</sub> (1 hour) façade corrected habitable rooms. (maximum hour between 6 am and 10 pm) b. ≤50 dB(A) Leq (1 hour) façade corrected (maximum hour between 10 pm and 6 am) c. ≤64 dB(A) L<sub>max</sub> façade corrected (between 10pm and 6am) 2. in accordance with chapter 7 – Integrated noise barrier design of the Transport Noise Management Code of Practice - Volume 1 Road Traffic Noise, Department of Transport and Main Roads, 2013. Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with section 2.7 of the Interim Guide to Development in a Transport Environment: Light Rail, Department of Transport and Main Roads, 2017. If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used. In some instances, the design of noise barriers and mounds to achieve the noise criteria above the ground floor may not be reasonable or practicable. In these instances, any relaxation of the criteria is at the discretion of the Department of Transport and Main Roads. OR all of the following acceptable outcomes apply: AO17.2 Buildings which include a habitable room are setback the maximum distance possible from the light rail. AND

rail.

AND

AO17.3 Buildings are designed and oriented so that habitable rooms are located furthest from the light

**AO17.4** Buildings are designed and constructed using materials which ensure that **habitable rooms** 

meet the following internal noise criteria:

Performance outcomes	Acceptable outcomes
- Portormanoc oatoomics	1. ≤35 dB(A) L <sub>eq</sub> (1 hour) (maximum hour over 24
	hours).
	, '
	Note: Noise levels from a <b>light rail</b> are to be measured in
	accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise.
	To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is
	provided, prepared in accordance with section 2.7 of the Interim
	Guide to Development in a Transport Environment: Light Rail,
PO18 Development involving an accommodation	Department of Transport and Main Roads, 2017. <b>AO18.1</b> A noise barrier or earth mound is provided
activity minimises noise intrusion from a light rail in	which is design, sited and constructed:
outdoor spaces for passive recreation.	to meet the following external noise criteria in
·	outdoor spaces for passive recreation:
	a. ≤52 dB(A) L <sub>eq</sub> (1 hour) free field (maximum
	hour between 6 am and 10 pm)
	b. ≤66 dB(A) L <sub>max</sub> free field
	in accordance with chapter – Integrated noise barrier design of the Transport Noise
	Management Code of Practice – Volume 1 Road
	Traffic Noise, Department of Transport and Main
	Roads, 2013.
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment is
	provided, prepared in accordance with section 2.7 of the Interim
	Guide to Development in a Transport Environment: Light Rail, Department of Transport and Main Roads, 2017.
	Department of Transport and Wain Roads, 2017.
	OR
	AO18.2 Each dwelling has access to an outdoor
	space for passive recreation which is shielded
	from light rail transport infrastructure by a
	building, a solid gap-free fence, or other solid gap-free <b>structure</b> .
	nee structure.
	AND
	AO18.3 Each dwelling with a balcony directly
	exposed to noise from a <b>light rail</b> has a continuous
	solid gap-free balustrade (other than gaps required
	for drainage purposes to comply with the Building Code of Australia).
Childcare centres and educational establishments	,
PO19 Development involving a:	AO19.1 A noise barrier or earth mound is provided
1. childcare centre; or	which is design, sited and constructed:
2. educational establishment	to meet the following external noise criteria at
minimises noise intrusion from a <b>light rail</b> in <b>indoor</b>	the building envelope:
education areas and indoor play areas.	a. ≤55 dB(A) L <sub>eq</sub> (1 hour) façade corrected
	(maximum hour during normal opening hours)
	2. in accordance with chapter 7 – Integrated noise
	barrier design of the Transport Noise
	Management Code of Practice – Volume 1 Road
	Traffic Noise, Department of Transport and Main
	Roads, 2013.

Performance outcomes	Acceptable outcomes
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with section 2.7 of the Interim Guide to Development in a Transport Environment: Light Rail, Department of Transport and Main Roads, 2017.
	If the building envelope is unknown, the deemed-to-comply setback distances for buildings stipulated by the local planning instrument or relevant building regulations should be used.
	OR all of the following acceptable outcomes apply:
	AO19.2 Buildings which include indoor education areas and indoor play areas are setback the maximum distance possible from a light rail.
	AND
	AO19.3 Buildings are designed and oriented so that indoor education areas and indoor play areas are located furthest from a light rail.
	AND
	AO19.4 Buildings are designed and constructed using materials which ensure indoor education areas and indoor play areas meet the following internal noise criteria:  1. ≤35 dB(A) L <sub>eq</sub> (1 hour) (maximum hour during opening hours).
	Note: Noise levels from a <b>light rail</b> are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise.
	To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with section 2.7 of the Interim Guide to Development in a Transport Environment: Light Rail, Department of Transport and Main Roads, 2017.
PO20 Development involving a:  1. childcare centre; or	AO20.1 A noise barrier or earth mound is provided which is design, sited and constructed:
2. educational establishment	to meet the following external noise criteria in
minimises noise intrusion from a light rail in outdoor education areas and outdoor play areas.	outdoor education areas and outdoor play areas:  a. ≤52 dB(A) L <sub>eq</sub> (1 hour) free field (maximum hour during normal opening hours)  b. ≤66 dB(A) L <sub>max</sub> free field (during normal opening hours)
	<ol> <li>in accordance with chapter 7 – Integrated noise barrier design of the Transport Noise Management Code of Practice – Volume 1 Road Traffic Noise, Department of Transport and Main Roads, 2013.</li> </ol>
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment is provided, prepared in accordance with section 2.7 of the Interim Guide to Development in a Transport Environment: Light Rail, Department of Transport and Main Roads, 2017.

Performance outcomes	Acceptable outcomes
	OR
	AO20.2 Each outdoor education area and outdoor play area is shielded from noise generated from a light rail by a building, a solid gap-free fence, or other solid gap-free structure.
Hospitals	T
PO21 Development involving a hospital minimises noise intrusion from a light rail in patient care areas.	<ul> <li>AO21.1 Hospitals are designed and constructed using materials which ensure patient care areas meet the following internal noise criteria:</li> <li>1. ≤35 dB(A) L<sub>eq</sub> (1 hour) (maximum hour during opening hours).</li> </ul>
	Statutory note: Noise levels from a <b>light rail</b> are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise.
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified noise assessment report is provided, prepared in accordance with section 2.7 of the Interim Guide to Development in a Transport Environment: Light Rail, Department of Transport and Main Roads, 2017.
Vibration	
Hospitals	T
PO22 Development involving a hospital minimises vibration impacts from a light rail in patient care areas.	AO22.1 Hospitals are designed and constructed to ensure vibration in the treatment area of a patient care area does not exceed a vibration dose value of 0.1m/s <sup>1.75</sup> .  AND
	AND
	<b>AO22.2 Hospitals</b> are designed and constructed to ensure vibration in the ward area of a <b>patient care area</b> does not exceed a vibration dose value of 0.4m/s <sup>1.75</sup> .
	Note: To demonstrate compliance with the acceptable outcome, it is recommended that a RPEQ certified vibration assessment report be provided.
Light	
PO23 Development involving an accommodation activity or hospital minimises lighting impacts from a light rail.	AO23.1 Buildings for an accommodation activity or hospital are designed to minimise the number of windows or transparent/translucent panels facing a light rail.
	AND
	AO23.2 Windows facing a light rail include treatments to block light from a light rail.

Table 4.2.3: Development in a future light rail environment

Performance outcomes	Acceptable outcomes
PO24 Development does not impede delivery of light rail infrastructure in a future light rail	AO24.1 Development is not located in a future light rail corridor.
corridor.	OR

Performance outcomes	Acceptable outcomes
- Torrormanoc outcomes	AO24.2 Development is sited and designed so that
	permanent buildings, <b>structures</b> , infrastructure,
	services or utilities are not located in a future light
	rail corridor.
	OR all of the following acceptable outcomes apply:
	AO24.3 Structures and infrastructure located in a future light rail corridor are able to be readily relocated or removed without materially affecting the viability or functionality of the development.
	AND
	AO24.4 Development does not involve filling and excavation of, or material changes to, a future light rail corridor.
	AND
	AO24.5 Land is able to be reinstated to the predevelopment condition at the completion of the use.
PO25 Filling, excavation, building foundations and	No acceptable outcome is prescribed.
retaining structures do not undermine, cause	
subsidence of, or groundwater seepage into, a	
future light rail corridor.	
Note: To demonstrate compliance with this performance outcome, it is recommended that an RPEQ certified geotechnical assessment is provided, prepared in accordance with Volume 3 of the Road Planning And Design Manual, 2 <sup>nd</sup> edition, Department of Transport and Main Roads, 2016.	
Section 2.2 of the Interim Guide to Development in a Transport Environment: Light rail, Department of Transport and Main 2017 provides guidance on how to comply with this performance outcome.	
PO26 Fill material from a development site does not	AO26.1 Fill material is free of contaminants
result in contamination of land for a future light rail	including acid sulfate content.
corridor.	
	Note: Soil and rocks should be tested in accordance with AS1289 – Methods of testing soils for engineering purposes and AS4133 2005 – Methods of testing rocks for engineering purposes.
	AND
	AO26.2 Compaction of fill is carried out in
	accordance with the requirements of AS 1289.0 2000 – Methods of testing soils for engineering purposes.
PO27 Development does not result in an actionable	No acceptable outcome is prescribed.
nuisance, or worsening of stormwater, flooding or	The state of the s
drainage impacts in a <b>future light rail corridor</b> .	
and a mile and a manage of a m	

## 4.3 Reference documents

Department of Energy and Water Supply 2013, Queensland Urban Drainage Manual

Department of Transport and Main Roads 2013, Transport Noise Management Code of Practice: Volume 1 (Road Traffic Noise)

Department of Transport and Main Roads 2016, Transport Noise Management Code of Practice volume 2: Construction Noise and Vibration

Department of Transport and Main Roads 2015, Road drainage manual

Department of Transport and Main Roads 2016, Road Planning and Design Manual 2<sup>nd</sup> edition: Volume 3

Department of Transport and Main Roads 2017, Interim Guide to Development in a Transport Environment: Light rail (as published)

International Erosion Control Association Australasia, Best Practice Erosion and Sediment Control document

Queensland Rail, Civil Engineering Technical Requirements and standard drawings: Civil-SR-008 – Protection screens

Standards Australia 1997, AS1055.1–1997 Acoustics – Description and measurement of environmental noise

Standards Australia 2000, AS1289.0-2000 - Methods of testing soils for engineering purposes

Standards Australia 2005, AS4133.0–2005 – Methods of testing rocks for engineering purposes

## 4.4 Glossary of terms

Accommodation activity means any of the following:

- 1. caretaker's accommodation
- 2. community residence
- 3. dual occupancy
- 4. dwelling house
- 5. dwelling unit
- 6. multiple dwelling
- 7. relocatable home park
- 8. residential care facility
- 9. resort complex
- 10. retirement facility
- 11. rooming accommodation
- 12. short-term accommodation
- 13. tourist park
- 14. a development with a combination of uses 1 to 13.

**Actionable nuisance** means where stormwater or surface water drainage to a downstream property causes a loss of enjoyment of property or physical damage to property (termed 'nuisance') such that the nuisance is actionable in law.

Note: See the Queensland Urban Drainage Manual, Department of Energy and Water Supply, 2013 for further information.

Childcare centre see schedule 24 of the Planning Regulation 2017.

Note: Childcare centre means the premises used for care, education and minding, but not residence, of children.

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA mapping system** is available on the department's website.

#### Educational establishment see schedule 24 of the Planning Regulation 2017.

Note: Educational establishment means the use of premises for:

- 1. training and instruction to impart knowledge and develop skills; or
- 2. student accommodation, before or after school care, or vacation care, if the use is ancillary to the use in paragraph 1.

Future light rail corridor means land identified in a guideline made under section 8E of the *Transport Planning and Coordination Act 1994*, for light rail transport infrastructure or light rail transport infrastructure works.

#### Habitable room see the Building Code of Australia.

Note: **Habitable room** means a room used for normal domestic activities, and includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom but excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

#### Hospital see schedule 24 of the Planning Regulation 2017.

Note: Hospital means the use of premises for:

- 1. the medical or surgical care or treatment of patients, whether or not the care or treatment requires overnight accommodation; or
- 2. providing accommodation for patients; or
- 3. providing accommodation for employees, or any other use, if the use is ancillary to the use in paragraphs 1 or 2.

**Indoor education area** means an enclosed area within a **childcare centre** or **educational establishment** intended for use for the training or teaching of people including a classroom, lecture hall/theatre and library.

**Indoor play area** means an enclosed area within a **childcare centre** or **educational establishment** intended for use for children's play. This term excludes functional areas such as bathrooms, food preparation areas, washing facilities and other spaces of a specialised nature.

#### **Light rail** see schedule 6 of the *Transport Infrastructure Act 1994*.

Note: Light rail means:

- 1. a route wholly or partly dedicated to the priority movement of **light rail vehicles** for passenger transport purposes, whether or not the route was designed and constructed for those purposes as well as other purposes; and
- 2. places for the taking on and letting off of light rail vehicle passengers using the route.

#### Light rail corridor see schedule 24 of the Planning Regulation 2017.

Note: Light rail corridor means:

- 1. land on which light rail transport infrastructure is situated; or
- 2. land on which light rail transport infrastructure works are carried out; or
- 3. land on which services are provided for the maintenance or operation of light rail transport infrastructure are situated.

#### Light rail hazard zone means the area extending:

- 1. 1.75 metres either side of the nearest rail below ground and up to 3 metres above ground
- 2. 3 metres either side of the nearest rail higher than 3 metres above ground.

Note: Refer to the Guide to Development in a Transport Environment: Light rail, Department of Transport and Main Roads, 2017 for a visual representation of the **light rail hazard zone**.

#### Light rail transport infrastructure see schedule 6 of the Transport Infrastructure Act 1994.

Note: Light rail transport infrastructure means each of the following:

- 1. the rails on which light rail vehicles run for a light rail and pavement incorporating the rails
- 2. the stations for operating a **light rail**
- other facilities necessary for managing or operating a light rail, including, for example:
  - a. works built for the light rail, including the following:
    - i. cuttings
    - ii. drainage works
    - iii. excavations
    - iv. land fill
    - v. track support earthworks; and
  - b. light rail vehicles that operate on a light rail; and
  - c. the following things if they are associated with the light rail's operation:
    - i. access or service lanes
    - ii. bridges, including bridges over water
    - iii. communication systems
    - iv. light rail operation control facilities

- v. machinery and other equipment
- vi. maintenance depots
- vii. marshalling yards
- viii. monitoring and security systems
- ix. noise barriers
- x. notice boards, notice markers and signs
- xi. office buildings
- xii. overhead wiring
- xiii. over-track structures
- xiv. passenger interchange facilities between light rail and other modes of transport
- xv. platforms
- xvi. positioning systems
- xvii. power and communication cables
- xviii. power supply substations and equipment
- xix. signalling facilities and equipment
- xx. survey stations, pegs and marks
- xxi. ticketing equipment and systems
- xxii. timetabling systems
- xxiii. tunnels
- xxiv. under-track structures
- xxv. workshops
- 4. vehicle parking and set down facilities for intending passengers for a **light rail**
- 5. pedestrian facilities, including paving of footpaths, for a **light rail**
- 6. other facilities, or commercial or retail outlets or works, for the convenience of passengers and others who may use a **light rail**, including, for example, automatic teller machines, lockers or showers for cyclists and others, newsagents and wheelchair hire or exchange centres
- 7. landscaping or associated works for a light rail.

#### Light rail transport infrastructure works see schedule 6 of the Transport Infrastructure Act 1994.

Note: Light rail transport infrastructure works means works done for:

- 1. constructing light rail transport infrastructure or things associated with light rail transport infrastructure
- 2. the maintenance of light rail transport infrastructure or of things associated with light rail transport infrastructure
- 3. facilitating the operation of light rail transport infrastructure or things associated with light rail transport infrastructure
- 4. establishing, constructing or maintaining transport infrastructure, other than **light rail transport infrastructure**, if the works are:
  - a. directly related to an activity mentioned in paragraph 1, 2 or 3; and
- b. necessary for the safety, efficiency and operational integrity of transport infrastructure
- 5. other works declared under a regulation to be light rail transport infrastructure works.

#### Light rail vehicle see schedule 6 of the Transport Infrastructure Act 1994.

Note: Light rail vehicle means a type of transport that:

- 1. is intended wholly or mainly for the carriage of passengers or for track maintenance
- 2. travels on flanged wheels on parallel rails
- is designed to operate in line of sight on road-like areas.

Loading means pressure or force exerted on land or infrastructure.

**Outdoor education area** means outdoor areas intended for use for the training or teaching of persons. This term does not include playgrounds or outdoor sport and recreational areas.

#### Outdoor play area see the Queensland Development Code.

Note: **Outdoor play area** means an unenclosed area located outside the external walls of the building. This term only includes playgrounds/play areas in a **childcare centre** or **educational establishment**.

**Outdoor spaces for passive recreation** means **private open space**, communal open space or public open space associated with the development.

Overhead line equipment means overhead lines, cabling and associated structures used to provide power to electric light rail vehicles.

#### Patient care area see the Building Code of Australia.

Note: **Patient care area** means a part of a health-care building normally used for the treatment, care, accommodation, recreation, dining and holding of patients including a ward area and treatment area. A ward area means that part of a **patient care area** for resident patients and may contain areas for accommodation, sleeping, associated living and nursing facilities. A treatment area means an area within a **patient care area** such as an operating theatre and rooms used for recovery, minor procedures, resuscitation, intensive care and coronary care from which a patient may not be readily moved.

**Planned upgrade** means an extension, upgrade, or duplication of state transport infrastructure or transport networks for which affected land has been identified:

- 1. in a publicly available government document; or
- 2. in written advice to affected land owners.

Note: Government documents are Commonwealth, state or local government documents that include a statement of intent for, or a commitment to, a planning outcome or infrastructure provision. See the **DA mapping system**.

**Public passenger service** see schedule 3 of the *Transport Operations (Passenger Transport) Act 1994.* Note: **Public passenger service** means a service for the carriage of passengers if:

- 1. the service is provided for fare or other consideration; or
- 2. the service is provided in the course of a trade or business (but not if it is provided by an employer solely for employees); or
- 3. the service is a courtesy or community transport service; and
- 4. includes a driver service and a service for the administration of taxi services, but does not include a service excluded from the *Transport Operations (Passenger Transport) Act 1994* by a regulation.

## **Public passenger transport infrastructure** see schedule 1 of the *Transport Planning and Coordination Act* 1994.

Note: Public passenger transport infrastructure means infrastructure for, or associated with, the provision of public passenger transport, including, but not limited to:

- 1. a transit terminal for public passengers services (for example, an airport terminal, a coach terminal, a cruise ship terminal)
- 2. a ferry terminal, jetty, pontoon or landing for ferry services
- 3. a bus stop, bus shelter, bus station or bus lay-by
- 4. a busway station
- 5. a light rail station
- 6. a taxi rank, limousine rank or limousine standing area
- 7. a railway station
- 8. vehicle parking and set-down facilities
- 9. pedestrian and bicycle paths and bicycle facilities
- 10. a road on which a public passenger transport service operates.

Private open space means an outdoor space for the exclusive use of occupants of a building.

**Retaining structures** means retention **structures** and systems such as walls, anchors, bolts, soil nails, shoring, piles, piers, beams.

Structure means any built structure as well as retaining structures.

## 4.5 Abbreviations

RPEQ - Registered Professional Engineer of Queensland

# State code 5: Development in a statecontrolled transport tunnel environment

## **5.1 Purpose statement**

The purpose of this code is to protect **state-controlled transport tunnels** from adverse impacts of development. The purpose of this code is also to protect the safety of people using, and living and working near **state-controlled transport tunnels**.

Specifically, this code seeks to ensure:

- 1. development does not create a safety hazard for users of a **state-controlled transport tunnel**, by increasing the likelihood or frequency of fatality or serious injury
- 2. development does not compromise the structural integrity of state-controlled transport tunnels
- development does not compromise the state's ability to construct state-controlled transport tunnels and future state-controlled transport tunnels, or significantly increase the cost to construct statecontrolled transport tunnels and future state-controlled transport tunnels
- 4. development does not compromise the state's ability to maintain and operate **state-controlled transport tunnels**, or significantly increase the cost to maintain and operate **state-controlled transport tunnels**
- 5. the community is protected from significant adverse impacts resulting from environmental emissions generated by **state-controlled transport tunnels**.

Note: A document to provide guidance on how to comply with the performance outcomes of this code is currently being drafted by the Department of Transport and Main Roads.

# 5.2 Performance outcomes and acceptable outcomes

All development in a **state-controlled transport tunnel** environment should demonstrate compliance with the relevant provisions of table 5.2.1.

All development in a **future state-controlled transport tunnel** environment should demonstrate compliance with the relevant provisions of table 5.2.2.

Table 5.2.1: Development in a state-controlled tunnel environment

Performance outcomes	Acceptable outcomes
Buildings and structures	
PO1 The location of buildings, structures, infrastructure, services and utilities does not cause damage to a state-controlled transport tunnel, or obstruct state-controlled transport tunnel infrastructure.	AO1.1 Buildings, structures, infrastructure, services and utilities are not located on land identified as a state-controlled transport tunnel.  AND
	AO1.2 Buildings, structures, infrastructure, services and utilities can be maintained without requiring access to land identified as a state-controlled transport tunnel.
PO2 Buildings, structures, infrastructure, services and utilities do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.	No acceptable outcome is prescribed.
Note: Information on the location of services and public utilities in a <b>state-controlled transport tunnel</b> can be obtained from the <b>railway manager</b> and/or 'Dial Before You Dig' service.	

Performance outcomes	Acceptable outcomes
Performance outcomes	Acceptable outcomes
Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or	
public utility plant will need to be relocated, an applicant should	
contact the relevant service or public utility plant provider for	
standards and design specifications for the alternative alignment.  Any costs of relocation are to be borne by the developer.	
PO3 Buildings, structures, infrastructure, services	No acceptable outcome is prescribed.
and utilities do not add or remove <b>loading</b> that will	The decoptable outcome to proceined.
cause damage to a state-controlled transport	
tunnel or state-controlled tunnel infrastructure.	
Note: To demonstrate compliance with this performance outcome, it is recommended a Registered Professional Engineer of Queensland (RPEQ) certified geotechnical assessment is	
provided.	
PO4 Buildings, structures, infrastructure, services	No acceptable outcome is prescribed.
and utilities do not cause ground movement or	
vibration impacts that would cause damage or nuisance to a <b>state-controlled transport tunnel</b> or	
state controlled transport tunnel infrastructure.	
out controlled transport termior illitractiuotule.	
Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.	
PO5 Buildings, structures, infrastructure, services	No acceptable outcome is prescribed.
and utilities do not cause ground water disturbance	•
on land for a state-controlled transport tunnel.	
Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment, is provided.	
Filling, excavation and retaining structures	
Filling, excavation and retaining structures PO6 Filling, excavation and retaining structures do	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to,	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled	No acceptable outcome is prescribed.
<b>PO6</b> Filling, excavation and <b>retaining structures</b> do not interfere with, or result in damage to,	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment.	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.	
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause	
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and	
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport	
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport tunnel.  Note: To demonstrate compliance with this performance outcome,	
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport tunnel.  Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is	
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport tunnel.  Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport tunnel.  Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.  PO8 Excavation, boring, piling or fill compaction	
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport tunnel.  Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport tunnel.  Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.  PO8 Excavation, boring, piling or fill compaction during construction of a development does not result	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport tunnel.  Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.  PO8 Excavation, boring, piling or fill compaction during construction of a development does not result in ground movement or vibration impacts that would	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport tunnel.  Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.  PO8 Excavation, boring, piling or fill compaction during construction of a development does not result in ground movement or vibration impacts that would cause damage or nuisance to a state-controlled transport tunnel.	No acceptable outcome is prescribed.
PO6 Filling, excavation and retaining structures do not interfere with, or result in damage to, infrastructure or services in a state-controlled transport tunnel.  Note: Information on the location of services and public utilities in a state-controlled transport tunnel can be obtained from the railway manager and/or 'Dial Before You Dig' service.  Where development will impact on a service or public utility plant in a state-controlled transport tunnel, such that the service or public utility plant will need to be relocated, an applicant should contact the relevant service or public utility plant provider for standards and design specifications for the alternative alignment. Any costs of relocation are to be borne by the developer.  PO7 Filling, excavation, building foundations and retaining structures do not undermine or cause subsidence of land for a state-controlled transport tunnel.  Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.  PO8 Excavation, boring, piling or fill compaction during construction of a development does not result in ground movement or vibration impacts that would cause damage or nuisance to a state-controlled	No acceptable outcome is prescribed.

Performance outcomes	Acceptable outcomes
PO9 Development does not involve blasting.	No acceptable outcome is prescribed.
PO10 Filling and excavation, building foundations	No acceptable outcome is prescribed.
and <b>retaining structures</b> do not cause damage to a	The acceptable catedine is presented.
state-controlled transport tunnel by adding or	
removing <b>loading</b> .	
3	
Note: To demonstrate compliance with this performance outcome,	
it is recommended a RPEQ certified geotechnical assessment is	
PO11 Filling and excavation, building foundations	No acceptable outcome is prescribed.
and <b>retaining structures</b> do not cause ground	No acceptable outcome is prescribed.
water disturbance to a state-controlled transport	
tunnel corridor.	
tumer corridor.	
Note: To demonstrate compliance with this performance outcome,	
it is recommended a RPEQ certified geotechnical assessment is	
provided.	AO40 4 Fill material in from a forest and a sustainable
PO12 Fill material from a development site does not	AO12.1 Fill material is free of contaminants
result in contamination of a state-controlled transport tunnel corridor.	including acid sulfate content.
transport tunnel corridor.	Note: Soil and rocks should be tested in accordance with AS
	1289 – Methods of testing soils for engineering purposes and AS
	4133 2005 – Methods of testing rocks for engineering purposes.
	AND
	AO12.2 Compaction of fill is carried out in
	accordance with the requirements of AS 1289.0
	2000 – Methods of testing soils for engineering
P040 5''''	purposes.
PO13 Filling and excavation in the vicinity of a state-	AO13.1 Compaction of fill is carried out in
controlled transport tunnel portal does not cause	accordance with the requirements of AS 1289.0
wind-blown dust nuisance in a state-controlled	2000 – Methods of testing soils for engineering
transport tunnel.	purposes.
	AND
	AND
	AO13.2 Dust suppression measures are used during
	filling and excavation activities such as wind breaks
	or barriers and dampening of ground surfaces.
PO14 Filling and excavation material does not cause	AO14.1 Development does not store fill, spoil or any
damage, obstruction or nuisance in a <b>state-</b>	other material in a state-controlled transport
controlled transport tunnel corridor.	tunnel corridor.
Stormwater and drainage	
PO15 Development does not result in an actionable	No acceptable outcome is prescribed.
nuisance or worsening of stormwater, flooding or	· '
drainage impacts in a state-controlled transport	
tunnel corridor or a state-controlled transport	
tunnel.	
PO16 Run-off from the development site during	AO16.1 Run-off from the development site during
construction of development does not cause siltation	construction is not discharged to stormwater
of stormwater infrastructure affecting a <b>state-</b>	infrastructure for a state-controlled transport
controlled transport tunnel.	tunnel.
PO17 Development does not cause damage to	No acceptable outcome is prescribed.
tunnel drainage structures.	
Access	
PO18 Vehicular access to a development is not from a state-controlled transport tunnel.	No acceptable outcome is prescribed.

Performance outcomes	Acceptable outcomes
PO19 Development does not obstruct or impede	AO19.1 Development is designed and sited to
existing access to a state-controlled transport	ensure existing authorised access points and access
tunnel.	routes for maintenance and emergency works to a
	state-controlled transport tunnel are clear from
	obstructions at all times.
Network safety	
PO20 Development involving dangerous goods	AO20.1 Development does not involve handling or
adjacent to a state-controlled transport tunnel	storage of hazardous chemicals above the threshold
corridor does not adversely impact on the safety or	quantities listed in table 5.2 of Model Planning
operations of a <b>state-controlled transport tunnel</b> .	Scheme Development Code for Hazardous
	Industries and Chemicals, Office of Industrial
Note: Development involving dangerous goods, or hazardous	Relations, Department of Justice and Attorney-
chemicals above the threshold quantities listed in table 5.2 of the Model Planning Scheme Development Code for Hazardous	General, 2016.
Industries and Chemicals, Office of Industrial Relations,	
Department of Justice and Attorney-General, 2016, should	
demonstrate that impacts on a state-controlled transport tunnel	
from a fire, explosion, spill, gas emission or <b>dangerous goods</b> incident can be appropriately mitigated.	
Air and light	
PO21 Development involving an accommodation	AO21.1 Each dwelling has access to an outdoor
activity located near a state-controlled transport	space for passive recreation which is shielded
tunnel portal minimises air quality impacts from a	from a state-controlled transport tunnel portal by
state-controlled transport tunnel in outdoor	a building, solid gap-free fence, or other solid gap-
spaces for passive recreation.	free structure.
PO22 Development involving a:	AO22.1 Each outdoor education area and
1. childcare centre; or	outdoor play area is shielded from a state-
2. educational establishment	controlled transport tunnel portal by a building,
	solid gap-free fence, or other solid gap-free
located near a state-controlled transport tunnel	structure.
portal minimises air quality impacts from a state-	
controlled transport tunnel in outdoor education	
areas and outdoor play areas.	
PO23 Development involving an accommodation	AO23.1 Buildings for an accommodation activity
activity or hospital located near a state-controlled	or <b>hospital</b> are designed to minimise the number of
transport tunnel portal minimises lighting impacts	windows or transparent/translucent panels facing a
from a state-controlled transport tunnel.	state-controlled transport tunnel portal.
	OR
	AO23.2 Windows facing a state-controlled
	transport tunnel include treatments to block light
	from state-controlled transport tunnel portal.
	nom state-controlled transport turner portal.

Table 5.2.2: Development impacting on a future state-controlled tunnel environment

Performance outcomes	Acceptable outcomes
PO24 Development does not impede the delivery of a future state-controlled transport tunnel.	AO24.1 Development is not located on land identified as a future state-controlled transport tunnel corridor.
	OR
	AO24.2 Development is sited and designed so that permanent buildings, structures, infrastructure, services or utilities are not located on land identified as a future state-controlled transport tunnel.
	OR all of the following acceptable outcomes apply:

Performance outcomes	Acceptable outcomes
	AO24.3 Structures and infrastructure located on land identified as a future state-controlled transport tunnel are able to be readily relocated or removed without materially affecting the viability or functionality of the development.
	AND
	AO24.4 Development does not involve filling and excavation of, or material changes to, land identified as a future state-controlled transport tunnel.
	AND
	AO24.5 Land is able to be reinstated to the pre- development condition at the completion of the use.
PO25 Filling and excavation, building foundations and retaining structures do not obstruct, undermine, or cause subsidence of land for a future state-controlled transport tunnel.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided, prepared in accordance with Volume 3 of the Road Planning And Design Manual 2 <sup>nd</sup> edition, Department of Transport and Main Roads, 2016.	
PO26 Filling and excavation, building foundations and retaining structures do not cause damage to land for a future state-controlled transport tunnel by adding or removing loading.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended a RPEQ certified geotechnical assessment is provided.	
PO27 Fill material from a development site does not result in contamination of land for a future state-controlled transport tunnel.	AO27.1 Fill material is free of contaminants including acid sulfate content.  Note: Soil and rocks should be tested in accordance with AS1289 – Methods of testing soils for engineering purposes and AS4133 2005 – Methods of testing rocks for engineering purposes.
	AND
	AO27.2 Compaction of fill is carried out in accordance with the requirements of AS1289.0 2000 – Methods of testing soils for engineering purposes.
PO28 Development does not result in an actionable nuisance or worsening of stormwater, flooding or drainage impacts on land for a future statecontrolled transport tunnel.	No acceptable outcome is prescribed.

# 5.3 Reference documents

Department of Justice and Attorney-General (Office of Industrial Relations) 2016, Model Planning Scheme Development Code for Hazardous Industries and Chemicals

Department of Transport and Main Roads 2015, Guide to Development in a Transport Environment: Rail

Department of Transport and Main Roads 2014, State development assessment provisions supporting information – filling and excavation

Department of Transport and Main Roads 2013, State development assessment provisions supporting information – stormwater and drainage

Department of Transport and Main Roads 2014, Design criteria for bridges and other structures manual

Department of Transport and Main Roads 2015, Road drainage manual

Department of Transport and Main Roads 2016, Road Planning and Design Manual 2<sup>nd</sup> edition: Volume 3

Department of Transport and Main Roads 2016, Transport Noise Management Code of Practice Volume 2: Construction noise and vibration

Department of Energy and Water Supply 2013, Queensland Urban drainage manual

Queensland Rail, Civil Engineering Technical Requirements and standard drawings:

Civil-SR-002 – Work in or about Queensland Rail property

Civil-SR-003 – Requirements for work on or near high voltage overhead line equipment and low voltage services

Civil-SR-005 – Design of buildings over or near railways

Civil-SR-012 - Collision protection of supporting elements adjacent to railways

Civil-SR-014 - Design of noise barriers adjacent to railways

Civil-SR-016 - Requirements for services under the railway corridor (non-QR services)

Standards Australia 2000, AS1289.0-2000 - Methods of testing soils for engineering purposes

Standards Australia 2010, AS2436–2010 – Guide to noise and vibration control on construction, demolition and maintenance sites

Standards Australia 2005, AS4133.0-2005 - Methods of testing rocks for engineering purposes

### 5.4 Glossary of Terms

Accommodation activity means any of the following:

- 1. caretaker's accommodation
- 2. community residence
- 3. dual occupancy
- 4. dwelling house
- 5. dwelling unit
- 6. multiple dwelling
- 7. relocatable home park
- 8. residential care facility
- 9. resort complex
- 10. retirement facility
- 11. rooming accommodation
- 12. short-term accommodation
- 13. tourist park
- 14. a development with a combination of uses 1 to 13.

**Actionable nuisance** means where stormwater or surface water drainage to a downstream property causes a loss of enjoyment of property or physical damage to property (termed 'nuisance') such that the nuisance is actionable in law.

Note: See the Queensland Urban Drainage Manual, Department of Energy and Water Supply, 2016 for further information.

ADG code see schedule 1 of the Work Health and Safety Act 2011.

Note: **ADG code** means the Australian Code for the Transport of Dangerous goods by Road and Rail approved by the Australian Transport Council, as updated from time to time.

#### Childcare centre see schedule 24 of the Planning Regulation 2017.

Note: Childcare centre means the premises used for minding or care, but not residence, of children.

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA** mapping system is available on the department's website.

Dangerous goods see schedule 1 of the Work Health and Safety Act 2011.

Note: Dangerous goods means:

- 1. asbestos; or
- 2. anything defined under the ADG code as:
  - a. dangerous goods; or
  - b. goods too dangerous to be transported.

#### **Educational establishment** see schedule 24 of the Planning Regulation 2017.

Note: **Educational establishment** means premises used for training and instruction designed to impart knowledge and develop skills. **Educational establishment** includes the following uses and activities if they are ancillary:

- 1. on-site student accommodation
- 2. on-site before and after school care
- 3. on site vacation care.

#### Future state-controlled transport tunnel see schedule 24 of the Planning Regulation 2017.

Note: Future state-controlled transport tunnel means a tunnel that forms part of a future state transport corridor.

#### Future state transport corridor see schedule 24 of the Planning Regulation 2017.

Note: Future State transport corridor means:

- a future state-controlled road; or
- 2. a future railway corridor; or
- 3. a future busway corridor; or
- 4. a future light rail corridor.

See the DA mapping system.

#### Hospital see schedule 24 of the Planning Regulation 2017.

Note: **Hospital** means the use of premises for:

- 1. the medical or surgical care or treatment of patients, whether or not the care or treatment requires overnight accommodation
- 2. providing accommodation for patients.

**Hospital** includes the use of premises for providing accommodation for employees and other activities that are ancillary to the **hospital**.

**Loading** means pressure or force exerted on land or infrastructure.

**Outdoor education area** means outdoor areas intended for use for the training or teaching of persons. This term does not include playgrounds or outdoor sport and recreational areas.

#### Outdoor play area see the Queensland Development Code.

Note: Outdoor play area means an unenclosed area located outside the external walls of the building. This term only includes playgrounds/play areas in a childcare centre or educational establishment.

**Outdoor spaces for passive recreation** means private open space, communal open space or public open space.

**Retaining structures** means retention **structures** and systems such as walls, batters, anchors, bolts, soil nails, shoring, piles, piers, beams and similar **structures**.

Structure means any built structure as well as retaining structures.

**State-controlled transport tunnel** see schedule 24 of the Planning Regulation 2017 Note: **State-controlled transport tunnel** means a tunnel that forms part of a state transport corridor. See the **DA mapping system**.

**State-controlled transport tunnel portal** means the entrance to a tunnel.

# 5.5 Abbreviations

RPEQ – Registered Professional Engineer of Queensland

# State code 6: Protection of state transport networks

## **6.1 Purpose statement**

The purpose of this code is to:

- 1. protect state transport infrastructure, public passenger transport infrastructure and public passenger services from the adverse impacts of development
- 2. maintain the operational performance of the transport network
- 3. ensure development enables safe and convenient access to public passenger transport.

Specifically, this code seeks to ensure development:

- 1. does not create a safety hazard for users of **state transport infrastructure** or **public passenger services** by increasing the likelihood or frequency of a fatality or serious injury
- does not result in a worsening of the physical condition or operating performance of the state transport network
- does not compromise the state's ability to cost-effectively construct, operate and maintain state transport infrastructure
- 4. provides **public passenger transport infrastructure** to enable development to be serviced by **public passenger transport**
- 5. provides safe and direct access to **public passenger transport infrastructure**, including access by cycling and walking.

# 6.2 Performance outcomes and acceptable outcomes

Table 6.2.1 identifies which performance outcomes in table 6.2.2 and 6.2.3 are relevant for the development types listed in schedule 20 of the Planning Regulation 2017.

All development should demonstrate compliance with the relevant provisions of table 6.2.2 and table 6.2.3, where relevant.

Table 6.2.1: Application of performance outcomes

Relevant provisions of the code	Development
Network Impacts	
PO1 – PO9	All development
Stormwater and drainage	
PO10 – PO12	All development
Planned upgrades	
PO13	All development
Public passenger transport infrastructure	
PO14	All development
PO15 – PO20	Accommodation activities, airport, business activities, club, educational establishment, function facility, hospital, hotel, major sport, recreation and entertainment facility, residential care facility, shop, shopping centre, short-term accommodation, theatre and tourist attraction
PO21 – PO22	Airport, club, function facility, hospital, hotel, major sport, recreation and entertainment facility, residential care facility, shop, shopping

Relevant provisions of the code	Development
	centre, short-term accommodation, theatre and
	tourist attraction
PO23	Educational establishment

Table 6.2.2: All development

Table 6.2.2: All development	
Performance outcomes	Acceptable outcomes
Network Impacts	
<b>PO1</b> Development does not result in a worsening of the safety of a <b>state-controlled road</b> .	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended that a Registered Professional Engineer of Queensland (RPEQ) certified road safety audit or road safety assessment (as applicable) is provided.	
Further information on determining whether a road safety audit or road safety assessment is required is provided in section 9 of the Guide to Traffic Impact Assessment, Department of Transport and Main Roads, 2017.	
PO2 Development does not result in a worsening of the infrastructure condition of a state-controlled road or road transport infrastructure.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended that a RPEQ certified traffic impact assessment and pavement impact assessment are provided.	
Further information on how to prepare a traffic impact assessment and pavement impact assessment is provided in the Guide to Traffic Impact Assessment, Department of Transport and Main Roads, 2017.	
<b>PO3</b> Development does not result in a worsening of operating conditions on a <b>state-controlled road</b> or the surrounding road network.	No acceptable outcome is prescribed.
Note: To demonstrate compliance with this performance outcome, it is recommended that an RPEQ certified traffic impact assessment is provided.	
Further information on how to prepare a traffic impact assessment is provided in the Guide to Traffic Impact Assessment, Department of Transport and Main Roads, 2017.	
<b>PO4</b> Development does not impose traffic loadings on a <b>state-controlled road</b> which could be accommodated on the <b>local road</b> network.	AO4.1 The layout and design of the development directs traffic generated by the development to the local road network.
PO5 Upgrade works on, or associated with, a state-controlled road are built in accordance with relevant design standards.	AO5.1 Upgrade works on a state-controlled road are designed and constructed in accordance with the Road Planning and Design Manual, 2 <sup>nd</sup> edition, Department of Transport and Main Roads, 2016.
PO6 Development involving the haulage of fill, extracted material or excavated spoil material exceeding 10,000 tonnes per year does not damage the pavement of a state-controlled road.	AO6.1 Fill, extracted material and spoil material is not transported to or from the development site on a state-controlled road.
Note: It is recommended that a transport infrastructure impact assessment and pavement impact assessment are provided.	
Further information on how to prepare a traffic impact assessment is provided in the Guide to Traffic Impact Assessment, Department of Transport and Main Roads, 2017.	
<b>PO7</b> Development does not adversely impact on the safety of a <b>railway crossing</b> .	AO7.1 Development does not require a new railway crossing.
	OR

Performance outcomes	Acceptable outcomes
Note: It is recommended that a traffic impact assessment be	
prepared to demonstrate compliance with this performance outcome. An impact on a level crossing may require an Australian Level Crossing Assessment Model (ALCAM) assessment to be	AO7.2 A new railway crossing is grade separated.
undertaken. Section 2.2 – Railway crossing safety of the Guide to Development in a Transport Environment: Rail, Department of	OR all of the following acceptable outcomes apply:
Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	AO7.3 Upgrades to a level crossing are designed and constructed in accordance with AS1742.7 – Manual of uniform traffic control devices, Part 7: Railway crossings and applicable rail manager standard drawings.
	Note: It is recommended a traffic impact assessment be prepared to demonstrate compliance with this acceptable outcome. An impact on a level crossing may require an Australian Level Crossing Assessment Model (ALCAM) assessment to be undertaken. Section 2.2 – Railway crossing safety of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this acceptable outcome.
	AND
	AO7.4 Access points achieve sufficient clearance from a level crossing in accordance with AS1742.7 – Manual of uniform traffic control devices, Part 7: Railway crossings by providing a minimum clearance of 5 metres from the edge running rail (outer rail) plus the length of the largest vehicle anticipated on-site.
	Note: Section 2.2 of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this acceptable outcome.
	AND
	AO7.5 On-site vehicle circulation is designed to give priority to entering vehicles at all times.
PO8 Development does not result in a worsening of the infrastructure condition of a railway or rail	No acceptable outcome is prescribed.
ransport infrastructure.  PO9 Development does not result in a worsening of	No acceptable outcome is prescribed.
operating conditions of a railway	
Stormwater and drainage PO10 Development does not result in an actionable	No acceptable outcome is prescribed.
nuisance, or worsening of, stormwater, flooding or drainage impacts in a state transport corridor.	Tro acceptable outcome is prescribed.
PO11 Run-off from the development site is not unlawfully discharged to a state transport corridor.	AO11.1 Development does not create any new points of discharge to a state transport corridor.
	AND
	AO11.2 Stormwater run-off is discharged to a lawful point of discharge.
	Note: Section 3.4 of the Queensland Urban Drainage Manual, Department of Energy and Water Supply, 2013, provides further information on <b>lawful points of discharge</b> .
	AND

Performance outcomes	Acceptable outcomes
	AO11.3 Development does not worsen the condition of an existing lawful point of discharge to a state transport corridor.
<b>PO12</b> Run-off from the development site does not cause siltation of stormwater infrastructure affecting a <b>state transport corridor</b> .	AO12.1 Run-off from the development site is not discharged to stormwater infrastructure for a <b>state transport corridor</b> .
Planned upgrades	
PO13 Development does not impede delivery of planned upgrades of state transport infrastructure.	AO13.1 Development is not located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of state transport infrastructure.
	Note: Land required for the planned upgrade of state transport infrastructure is identified in the DA mapping system.
	OR
	AO13.2 Development is sited and designed so that permanent buildings, structures, infrastructure, services or utilities are not located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of state transport infrastructure.
	OR all of the following acceptable outcomes apply:
	AO13.3 Structures and infrastructure located on land identified by the Department of Transport and Main Roads as land required for the planned upgrade of state transport infrastructure are able to be readily relocated or removed without materially affecting the viability or functionality of the development.
	AND
	AO13.4 Vehicular access for the development is consistent with the function and design of the planned upgrade of state transport infrastructure.
	AND
	AO13.5 Development does not involve filling and excavation of, or material changes to, land required for a planned upgrade to a state transport infrastructure.
	AND
	AO13.6 Land is able to be reinstated to the predevelopment condition at the completion of the use.

Table 6.2.3 Public passenger transport infrastructure

Table 6.2.3 Public passenger transport infrastructure	
Relevant provisions of the code	Development
Public passenger transport infrastructure	
PO14 Development does not damage or interfere with public passenger transport infrastructure, public passenger services or pedestrian or cycle access to public passenger transport infrastructure and public passenger services.	AO14.1 Vehicular access and associated road access works are not located within 5 metres of public passenger transport infrastructure.  AND
	AO14.2 Development does not necessitate the relocation of existing public passenger transport infrastructure.
	AND
	AO14.3 Development does not obstruct pedestrian or cyclist access to public passenger transport infrastructure or public passenger services.
	AND
	AO14.4 The normal operation of public passenger transport infrastructure or public passenger services is not interrupted during construction of the development.
transport infrastructure is provided to accommodate the demand for public passenger transport generated by the development.  Note: To demonstrate compliance with this performance outcome, it is recommended a public transport impact assessment be prepared in accordance with appendix 1 of the State Development Assessment Provisions Supporting Information – Public Passenger Transport Infrastructure, Department of Transport and Main Roads, 2017.  New or upgraded public passenger transport infrastructure provided should be in accordance with the Public Transport Infrastructure Manual, Department of Transport and Main Roads, 2015.  Refer to the SDAP Supporting Information: Public passenger transport infrastructure, Department of Transport and Main Roads, 2017, for further guidance on how to comply with the performance outcome.	No acceptable outcome is prescribed.
PO16 Development is designed to ensure the location of public passenger transport infrastructure prioritises and enables efficient public passenger services.	No acceptable outcome is prescribed.
Note: Chapters 2 and 5 of the Public Transport Infrastructure Manual, Department of Transport and Main Roads, 2015 provides guidance on how to comply with this performance outcome.  Refer to the SDAP Supporting Information: Public passenger transport infrastructure, Department of Transport and Main Roads, 2017, for further guidance on how to comply with the	
PO17 Development enables the provision or extension of public passenger services to the development and avoids creating indirect or inefficient routes for public passenger services.	No acceptable outcome is prescribed.

Relevant provisions of the code	Development
Note: Refer to the SDAP Supporting Information: Public passenger transport infrastructure, Department of Transport and Main Roads, 2017, for further guidance on how to comply with the performance outcome.	
PO18 New or modified road networks are designed to enable development to be serviced by public passenger services.	AO18.1 Roads catering for buses are arterial or sub-arterial roads, collector or their equivalent.
	AND
Note: Refer to the SDAP Supporting Information: Public passenger transport infrastructure, Department of Transport and Main Roads, 2017, for further guidance on how to comply with the performance outcome.	<b>AO18.2</b> Roads intended to accommodate buses are designed and constructed in accordance with Road Planning and Design Manual 2 <sup>nd</sup> edition, Volume 3: Guide to Road Design, Department of Transport and Main Roads, 2016.
	Note: Guidance on how to meet the acceptable outcome is available in the Road Planning and Design Manual 2 <sup>nd</sup> edition, Volume 3: Guide to Road Design, Department of Transport and Main Roads, 2016:  1. Part 3:  a. 4.2 Traffic lanes b. 4.8 Bicycle lanes c. 4.9 High occupancy vehicle (HOV) lanes d. 4.12 Bus stops e. 7 Horizontal alignment f. 7.7 Super elevation g. 7.9 Curve widening 2. Part 4: a. 6.3 Bus Facilities b. 5.6 Design vehicle swept path 3. Part 4A: a. 5 Auxiliary lanes 4. Part 4B: Roundabouts: a. 4 Geometric design b. 4.6 Circulating carriageway.
	AND
	AO18.3 Traffic calming devices are not installed on roads used for buses.
	Note: Chapter 2 of the Public Transport Infrastructure Manual, Department of Transport and Main Roads, 2015 provides guidance on how to comply with this acceptable outcome.
	AND
	AO18.4 Where road humps are installed on roads used for buses, the road humps are designed in accordance with the Manual of Uniform Traffic Control Devices, Department of Transport and Main Roads, 2016.
	Note: Guidance on how to meet the acceptable outcome is available in the Manual of Uniform Traffic Control Devices, Part 13:  1. Local Area Traffic Management, section 2.4 – Road humps 2. Supplement part 13: Local Area Traffic Management – 2.4.2-1 Hump profiles for bus routes.
PO19 Development provides safe, direct and	No acceptable outcome is prescribed.
convenient pedestrian access to existing and future public passenger transport infrastructure.	
Note: Chapter 3 of the Public Transport Infrastructure Manual, Department of Transport and Main Roads, 2015 provides guidance on how to comply with this performance outcome. In	

Balayant provisions of the code	Dovolonment
Relevant provisions of the code particular, it is recommended that a pedestrian demand analysis	Development
be provided to demonstrate compliance with the performance	
outcome.	
Refer to the SDAP Supporting Information: Public passenger	
transport infrastructure, Department of Transport and Main	
Roads, 2017, for further guidance on how to comply with the	
performance outcome.	ACCO 4 The leasting of an aite medianting associance
PO20 On-site vehicular circulation ensures the	AO20.1 The location of on-site pedestrian crossings
safety of both <b>public passenger transport</b> services and pedestrians.	ensures safe sight distances for pedestrians and public passenger services.
and pedestrians.	public passeriger services.
Note: Refer to the SDAP Supporting Information: Public	AND
passenger transport infrastructure, Department of Transport and	
Main Roads, 2017, for further guidance on how to comply with the performance outcome.	AO20.2 On-site circulation is designed and
periormanoe outcome.	constructed so that public passenger services can
	enter and leave in a forward gear at all times.
	-
	AND
	AO20 2 Dayslanment dags not result in multip
	AO20.3 Development does not result in public passenger services movements through car
	parking aisles.
PO21 Taxi facilities are provided to accommodate	No acceptable outcome is prescribed.
the demand generated by the development.	The acceptable datedine to proceed the
and definition by the development	
Note: Guidance on how to meet the performance outcome are	
available in chapter 7 of the Public Transport Infrastructure	
Manual, Department of Transport and Main Roads, 2015.	
Refer to the SDAP Supporting Information: Public passenger	
transport infrastructure, Department of Transport and Main	
Roads, 2017, for further guidance on how to comply with the performance outcome.	
PO22 Taxi facilities are located and designed to	AO22.1 A taxi facility is provided parallel to the
provide convenient, safe and equitable access for	kerb and adjacent to the main entrance.
passengers.	
	AND
Note: Refer to the SDAP Supporting Information: Public passenger transport infrastructure, Department of Transport and	
Main Roads, 2017, for further guidance on how to comply with the	AO22.2 Taxi facilities are designed in accordance
performance outcome.	With:
	1. AS2890.5–1993 Parking facilities – on-street
	parking and AS1428.1–2009 Design for access
	and mobility – general requirements for access – new building work
	AS1742.11–1999 Parking controls – manual of
	uniform traffic control devices
	3. AS/NZS 2890.6–2009 Parking facilities – off-
	street parking for people with disabilities
	4. Disability standards for accessible public
	transport 2002 made under section 31(1) of the
	Disability Discrimination Act 1992
	5. AS/NZS 1158.3.1 – Lighting for roads and public
	spaces, Part 3.1: Pedestrian area (category P)
DOOD E broadfarral (1971)	lighting – Performance and design requirements.
PO23 Educational establishments are designed to	AO23.1 Educational establishments are designed
ensure the safe and efficient operation of <b>public</b>	in accordance with the provisions of the Planning for
passenger services and pedestrian access.	Safe Transport Infrastructure at Schools, Department of Transport and Main Roads, 2011.
Note: Refer to the SDAP Supporting Information: Public	Dopartinent of Transport and Wall Noads, 2011.
passenger transport infrastructure, Department of Transport and	

Relevant provisions of the code	Development
Main Roads, 2017, for further guidance on how to comply with the	
performance outcome.	

### 6.3 Reference documents

Department of Transport and Main Roads 2016, Manual of Uniform Traffic Control Devices

Department of Transport and Main Roads 2011, Planning for Safe Transport Infrastructure at Schools

Department of Transport and Main Roads 2017, SDAP Supporting Information: Public passenger transport infrastructure

Department of Transport and Main Roads 2015, Guide to Development in a Transport Environment: Rail

Department of Transport and Main Roads, TransLink Division 2015 Public Transport Infrastructure Manual

Department of Transport and Main Roads 2016, Road Planning and Design Manual (Queensland Practice) 2nd edition

Department of Transport and Main Roads 2017, Guide to Traffic Impact Assessment

Standards Australia 2000, AS1742.7 – Roads and Maritime Services – Manual of uniform traffic control devices

Standards Australia 2009, AS1428.1–2009 Design for access and mobility – General requirements for access – New building work

Standards Australia 1999, AS1742.11-1999 Parking controls - Manual of uniform traffic control devices

Standards Australia 1993, AS2890.5-1993 Parking facilities - On-street parking

Standards Australia 2009, AS/NZS 2890.6:2009 Parking facilities – Off-street parking for people with disabilities

## 6.4 Glossary of terms

Accommodation activity means any of the following:

- 1. caretaker's accommodation
- 2. community residence
- 3. dual occupancy
- 4. dwelling house
- dwelling unit
- 6. multiple dwelling
- 7. relocatable home park
- 8. residential care facility
- 9. resort complex
- 10. retirement facility
- 11. rooming accommodation
- 12. short-term accommodation
- 13. tourist park
- 14. a development with a combination of uses 1 to 13.

**Arterial road** see glossary of terms, 4<sup>th</sup> edition, Austroads, 2015.

Note: Arterial road means a road that predominantly carries through traffic from one region to another, forming principal avenues of travel for traffic movements.

Club see schedule 24 of the Planning Regulation 2017.

Note: Club means the use of premises for:

1. an association established for literary, political, sporting, athletic or other similar purposes; or

2. preparing and selling food or drink, if the use is ancillary to the use in paragraph 1.

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA mapping system** is available on the department's website.

#### **Educational establishment** see schedule 24 of the Planning Regulation 2017.

Note: Educational establishment means the use of premises for:

- 1. training and instruction to impart knowledge and develop skills; or
- 2. student accommodation, before or after school care, or vacation care if the use is ancillary to the use in paragraph 1.

#### Extractive industry see schedule 24 of the Planning Regulation 2017.

Note: Extractive industry means the use of premises for:

- 1. extracting or processing extractive resources
- 2. any related activities, including, for example, transporting the resources to market.

#### Function facility see schedule 24 of the Planning Regulation 2017.

Note: Function facility means the use of premises for:

- 1. receptions or functions; or
- 2. preparing and providing food and liquor for consumption on the premises as part of a reception or function.

#### High impact industry see schedule 24 of the Planning Regulation 2017.

Note: High impact industry means the use of premises used for an industrial activity:

- 1. that is the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring or treating of products
- 2. that a local planning instrument applying to the premises states is a high impact industry
- 3. that complies with any thresholds for the activity stated in a local planning instrument applying to the preemies, including, for example, thresholds relating to the number of products manufactured or the level of emissions produced by the activity.

#### Hospital see schedule 24 of the Planning Regulation 2017.

Note: Hospital means the use of premises for:

- 1. the medical or surgical care or treatment of patients, whether or not the care or treatment requires overnight accommodation; or
- 2. providing accommodation for patients; or
- 3. providing accommodation for employees, or any other use, if the use is ancillary to the use in paragraphs 1 or 2.

#### Hotel see the schedule 24 of Planning Regulation 2017.

Note: Hotel means the use of premises for:

- 1. selling liquor for consumption on the premises
- 2. a dining or entertainment activity, or short-term accommodation if the use is ancillary to the use in sub-paragraph 1; but
- 3. does not include a bar.

#### Intensive animal industry see schedule 24 of the Planning Regulation 2017.

Note: Intensive animal industry means the use of premises for:

- the intensive production of animals or animal products, in an enclosure, that requires food and water to be provided mechanically or by hand; or
- 2. storing and packing feed and produce, if the use is ancillary to the use in paragraph 1; but
- 3. does not include the cultivation of aquatic animals.

#### Limited access policy see the Transport Infrastructure Act 1994.

Note: **Limited access policy** means a policy for a **limited access road** prepared under section 54(4) of the *Transport Infrastructure Act* 1994. A **limited access policy** can be obtained by contacting the appropriate Department of Transport and Main Roads' regional office.

#### **Limited access road** see the *Transport Infrastructure Act 1994*.

Note: Limited access road means a state-controlled road, or part of a state-controlled road, declared to be a limited access road under section 54 of the *Transport Infrastructure Act 1994*. See the **DA mapping system**.

Local road means a road controlled by a local government authority.

#### Major sport, recreation and entertainment facility see schedule 24 of the Planning Regulation 2017.

Note: **Major sport, recreation and entertainment facility** means the use of premises for large-scale events, including, for example, major sporting, recreation, conference or entertainment events.

#### New or changed access see schedule 24 of the Planning Regulation 2017.

Note: New or changed access between premises and a road or state transport corridor means:

- 1. the use of a new location as a relevant vehicular access between the premises and the road or corridor, or
- 2. the construction of a new relevant vehicular access between the premises and the road or corridor, or
- 3. the extension of an existing relevant vehicular access between the premises and the road or corridor; or

- 4. an increase in the number of vehicles regularly using an existing relevant vehicular access between the premises and the road or corridor; or
- 5. a change in the type of vehicles regularly using an existing relevant vehicular access between the premises and the road or corridor.

# **Planned upgrade** means an extension, upgrade, or duplication of **state transport infrastructure** or **transport networks** for which affected land has been identified:

- 1. in a publicly available government document; or
- 2. in written advice to affected land owners.

Note: Government documents are Commonwealth, state or local government documents that include a statement of intent for, or a commitment to, a planning outcome or infrastructure provision. See the **DA mapping system**.

# **Public passenger service** see schedule 3 of the *Transport Operations (Passenger Transport) Act 1994.* Note: **Public passenger service** means a service for the carriage of passengers if:

- 1. the service is provided for fare or other consideration
- 2. the service is provided in the course of a trade or business (but not if it is provided by an employer solely for employees)
- 3. the service is a courtesy or community transport service; and
- 4. includes a driver service and a service for the administration of taxi services, but does not include a service excluded from the Transport Operations (Passenger Transport) Act 1994 by a regulation.

#### Public passenger transport see section 3 of the Transport Planning and Coordination Act 1994.

Note: Public passenger transport means the carriage of passengers by a public passenger service using a public passenger vehicle.

## **Public passenger transport infrastructure** see section 3 of the *Transport Planning and Coordination Act* 1994

Note: Public passenger transport infrastructure means infrastructure for, or associated with, the provision of public passenger transport, including, but not limited to:

- 1. a transit terminal for public passenger services (for example, an airport terminal, a coach terminal, a cruise ship terminal)
- 2. a ferry terminal, jetty, pontoon or landing for ferry services
- 3. a bus stop, bus shelter, bus station or bus lay-by
- 4. a busway station
- 5. a light rail station
- 6. a taxi rank, limousine rank or limousine standing area
- 7. a railway station
- 8. vehicle parking and set-down facilities
- 9. pedestrian and bicycle paths and bicycle facilities; or
- 10. a road on which a public passenger transport service operates.

#### Rail transport infrastructure see schedule 6 of the Transport Infrastructure Act 1994.

Note: Rail transport infrastructure means facilities necessary for operating a railway, including:

- 1. railway track and works built for the railway, including for example:
  - a. cuttings; or
  - b. drainage works; or
  - c. excavations; or
  - d. land fill: or
  - e. track support earthworks any of the following things that are associated with the railway's operation:
    - i. bridges; or
    - ii. communication systems; or
    - iii. machinery and other equipment; or
    - iv. marshalling yards; or
    - v. noticeboards, notice markers and signs; or
    - vi. overhead electrical power supply systems; or
    - vii. over-track structures; or
    - viii. platforms; or
    - ix. power and communication cables; or
    - x. service roads; or
    - xi. signalling facilities and equipment; or
    - xii. stations; or
    - xiii. survey stations, pegs and marks; or
    - xiv. train operation control facilities; or
    - xv. tunnels; or
    - xvi. under-track structures vehicle parking and set down facilities for intending passengers for a **railway** that are controlled or owned by a railway manager or the chief executive [TIA]; or
    - xvii. pedestrian facilities, including footpath paving, for the **railway** that are controlled or owned by a railway manager or the chief executive [TIA], but does not include other rail infrastructure.

#### Railway see schedule 6 of the Transport Infrastructure Act 1994.

Note: Railway means a guided system, or proposed guided system, designed for the movement of rolling stock that is capable of transporting passengers or freight, or both, on a railway track, and:

- 1. includes
  - a. rail transport infrastructure;

- b. a railway being or proposed to be built on future railway land; but
- 2. does not include:
  - a. rolling stock;
  - b. a railway mentioned in section 107(2) of the Transport Infrastructure Act 1994.

See the **DA mapping system**.

#### Railway crossing see schedule 6 of the Transport Infrastructure Act 1994.

Note: Railway crossing means a level crossing, bridge or another structure used to cross over or under a railway.

#### Residential care facility see schedule 24 of the Planning Regulation 2017.

Note: Residential care facility means the use of premises for supervised accommodation, and medical and other support services, for persons who:

- 1. cannot live independently; or
- 2. require regular nursing or personal care.

#### Road hump see part 13, 1.3.4 of the Manual of Uniform Traffic Control Devices (MUTCD).

Note: **Road hump** means a raised transverse section of road causing sharp vertical displacement of vehicles, which is provided as a speed reduction (traffic calming) measure.

#### Road transport infrastructure see schedule 6 of the Transport Infrastructure Act 1994.

Note: Road transport infrastructure means transport infrastructure relating to roads.

#### **Shop** see the schedule 24 of Planning Regulation 2017.

Note: **Shop** means the use of premises for:

- 1. the display, sale or hire of goods; or
- 2. providing personal services or betting to the public.

#### **Shopping centre** see schedule 24 of the Planning Regulation 2017.

Note: Shopping centre means the use of premises for an integrated shopping complex consisting mainly of shops.

#### **Short-term accommodation** see schedule 24 of the Planning Regulation 2017.

Note: Short-term accommodation means the use of premises for:

- 1. providing accommodation of less than 3 consecutive months to tourists or travellers; or
- 2. a manager's residence, office, or recreation facilities for the exclusive use of guests, if the use is ancillary to the use in paragraph 1; but
- 3. does not include a **hotel**, nature-based tourism, resort complex or tourist park.

#### **Special industry** see schedule 24 of the Planning Regulation 2017.

Note: Special industry means the use or premises for an industrial activity:

- 1. that is the manufacturing, producing, processing, repairing, altering, recycling, storing, distributing, transferring or treating of products
- 2. that a local planning instrument applying to the premises states is **special industry**
- that complies with any thresholds for the activity stated in a local planning instrument applying to the premises, including, for example, thresholds relating to the number of products manufactured or the level of emissions produced by the activity.

#### State-controlled road means:

- 1. a state-controlled road within the meaning of the Transport Infrastructure Act 1994, schedule 6; or
- 2. state toll road corridor land.

Note: See the **DA mapping system**.

#### State transport corridor see schedule 24 of the Planning Regulation 2017.

Note: State transport corridor means:

- 1. a busway corridor; or
- a light rail corridor; or
- 3. a railway corridor; or
- 4. a state-controlled road.

#### State transport infrastructure means any of the following:

- 1. state-controlled road; or
- 2. busway transport infrastructure under the Transport Infrastructure Act 1994; or
- 3. light rail transport infrastructure under the Transport Infrastructure Act 1994; or
- 4. rail transport infrastructure under the Transport Infrastructure Act 1994; or
- 5. other rail infrastructure under the Transport Infrastructure Act 1994; or
- 6. active transport infrastructure under the Transport Planning and Coordination Act 1994.

Sub-arterial road see Glossary of Terms 4th edition, Austroads, 2015.

**Taxi facilities** see chapter 7 Public Transport Infrastructure Manual, Department of Transport and Main Roads, 2015.

Note: Taxi facilities means either a taxi rank or taxi bay.

#### Theatre see schedule 24 of the Planning Regulation 2017.

Note: Theatre means the use of premises for:

- 1. presenting movies, live entertainment or music to the public; or
- 2. the production of film or music; or
- 3. the following activities or facilities, if the use is ancillary to the use in paragraph 1 or 2:
  - a. preparing and selling food and drink for consumption on the premises
  - b. facilities for editing and post production
  - c. facilities for wardrobe, laundry and make-up
  - d. set construction workshops
  - e. sound stages.

#### Tourist attraction see schedule 24 of the Planning Regulation 2017.

Note: Tourist attraction means the use of premises for:

- 1. providing entertainment to, or a recreation facility for, the general public; or
- 2. preparing and selling food or drink for consumption on the premises, if the use is ancillary to the use in paragraph 1.

**Transport network** means the series of connected routes, corridors and transport facilities required to move goods and passengers and includes roads, **railways**, public transport routes (for example, bus routes), active transport routes (for example, cycle ways), freight routes and local, state and privately owned infrastructure.

### 6.5 Abbreviations

RPEQ - Registered Professional Engineer of Queensland

# **State code 7: Maritime safety**

# 7.1 Purpose statement

The purpose of the code is to ensure development:

- 1. supports the viable operation of aids to navigation
- 2. supports the safe operation of vessels in navigable waterways.

Note: Guidance for achieving the performance outcomes and acceptable solutions for this state code is available in the State Development Assessment Provisions Supporting Information – Marine Safety, Department of Transport and Main Roads, 2016.

# 7.2 Performance outcomes and acceptable outcomes

Development that is operational work in tidal waters should demonstrate compliance with the relevant provisions of table 7.2.1.

Table 7.2.1: Operational work

Table 7.2.1: Operational work  Performance outcomes	Acceptable outcomes
Lighting	
PO1 Development avoids lighting that has the potential to interfere with aids to navigation.	<ul> <li>AO1.1 Development ensures that at all times, all lights on or above the development site do not interfere with safe navigation in surrounding waterways by:</li> <li>1. shielding lights to prevent glare or reflection</li> <li>2. avoiding flood lighting which may reduce the visibility of aids to navigation</li> <li>3. avoiding flashing or flickering lights which may be confused with aids to navigation</li> <li>4. avoiding coloured lights such as green, blue or red lights, which may be confused with aids to navigation.</li> </ul>
	AND
	AO1.2 Lighting complies with section 3 of AS 4282–1997 Control of the obtrusive effects of outdoor lighting.
Aids to navigation	
PO2 Development does not interfere with aids to navigation.	<b>AO2.1</b> Development does not remove any material that may destabilise an <b>aid to navigation</b> , including ground tackle.
	AND
	<b>AO2.2</b> Development does not create any temporary or permanent obstruction of <b>aids to navigation</b> .
	Note: Where development has the potential to obstruct the line of sight to aids to navigation or interfere with the functioning of aids to navigation, an aid to navigation management plan is required.
	AND

Performance outcomes	Acceptable outcomes
Terrormance outcomes	AO2.3 Development keeps sight lines of any aids to
	navigation which cross the land clear of obstructions.
	Note: Where development has the potential to obstruct the line of sight to aids to navigation or interfere with the functioning of aids to navigation, an aid to navigation management plan is required.
	AND
	AO2.4 Development ensures ongoing access to aids to navigation for maintenance purposes.
	AND
Protection of navigable waterways	AO2.5 Development does not result in electrical or electro-magnetic emissions which may impede the operation of aids to navigation.
Protection of navigable waterways	AO2 4 Dayslanmant analysis markets water
<b>PO3</b> Development does not impede the safe movement of vessels in a <b>navigable waterway</b> .	<b>AO3.1</b> Development ensures <b>navigable waterways</b> are open to vessel traffic at all times.
	AND
	<ul> <li>AO3.2 Development, including structures and any vessel berthed at the structures:</li> <li>1. does not encroach into, pass over or under a navigation corridor; or</li> <li>2. is not located in a high risk maritime development zone.</li> </ul>
	Note: Navigation corridor and high risk maritime development zone layers are currently unavailable for Gold Coast waters.
	AND
	AO3.3 Development does not limit either the depth of a navigable waterway or the size of vessels which can safely navigate the waterway.
	Note: Where development proposes to temporarily or permanently limit the depth of a <b>navigable waterway</b> or the size of vessels which can navigate a waterway, it is recommended that a <b>vessel traffic management plan</b> be provided. It is also recommended a <b>marine execution plan</b> be submitted to the regional harbour master 30 days prior to the commencement of works.
	AND
	<b>AO3.4</b> Development involving the demolition of structures in a <b>navigable waterway</b> , including piling, ensures the entire structure is removed.
	AND
	AO3.5 Structures, including all freestanding piles, must be appropriately lit and clearly visible to approaching vessels, and reflective tape must be

Performance outcomes	Acceptable outcomes
	fitted to all structures to enhance visibility during the hours of darkness.
	Note: Where necessary, the regional harbour master may require the installation of <b>aids to navigation</b> on structures.

### 7.3 Reference documents

Department of Transport and Main Roads 2016, State Development Assessment Provisions Supporting Information – Maritime Safety

Standards Australia 1997, AS 4282-1997 Control of the obtrusive effects of outdoor lighting

### 7.4 Glossary of terms

**Aid to navigation** see section 104 of the *Transport Operations (Marine Safety) Act 1994*. Note: **An aid to navigation**:

- 1. is a device designed to be used for navigation or the guidance or mariners, including a device to help in:
  - a. fixing a ship's position; or
  - b. deciding a safe course for a ship; or
  - c. warning a ship of dangers or obstructions (for example: beacon, buoy, light, lighthouse, marine mark, radio aid or signal)
- 2. includes any structure or equipment ancillary to the **aid to navigation** (for example: the battery house providing a lighthouse with power; lifesaving equipment that is part of an **aid to navigation**)
- 3. does not include a device on board a ship.

**Aid to navigation management plan** includes information on changes to and potential obstructions of existing **aids to navigation** resulting from the proposed development project for all stages of the proposal lifecycle, to ensure safety of navigation at all times.

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA mapping system** is available on the department's website.

Gold Coast waters see section 7 of the Gold Coast Waterways Authority Act 2012.

Note: The Gold Coast Waterways Authority has responsibility for **Gold Coast waters** which include the inland waterways within the City of Gold Coast local government area as well as the areas at the mouth of the Nerang River, Currumbin Creek and Tallebudgera Creek.

**High risk maritime development zone** means areas indicated in the **DA mapping system** as **high risk maritime development zone**. These are areas in the vicinity of ports, state boat harbours, marinas, and navigationally difficult areas such as waterways which experience significant shoaling and waters between and around populated islands. **High risk maritime development zone** includes:

- 1. marinas with six or more boats
- 2. state boat harbours
- 3. port limits and/or pilotage areas
- 4. sensitive marine environments including areas of constant sand movement
- 5. from the coast to the extent of Queensland waters (three nautical miles).

**Marine execution plan** includes detailed information about all development related vessels and their operations during each of the stages of construction, and the relevant impacts on the availability of the **navigable waterway** to vessel traffic.

**Navigation corridor** means areas indicated in the **DA mapping system** as navigation corridor. These are the sections of a navigable tidal waterway allocated for the movement of vessels.

**Navigable waterway** means waters with a sufficient depth and width to allow safe passage by all vessel sizes and types that frequently use the area.

**Vessel traffic management plan** includes information on changes and increases to local vessel traffic resulting from the proposed development project and methods of cumulative vessel traffic management for all stages of the proposal lifecycle, to ensure safety of navigation at all times.

# State code 8: Coastal development and tidal works

### 8.1 Purpose statement

The purpose of this code is to ensure that development is designed and located to:

- 1. protect life, buildings and infrastructure from the impacts of coastal erosion
- maintain coastal processes
- 3. conserve coastal resources
- 4. maintain appropriate public use of, and access to and along, state coastal land
- 5. account for the projected impacts of climate change; and
- avoid impacts on matters of state environmental significance and, where avoidance is not reasonably possible, minimise and mitigate impacts, and provide an offset for significant residual impacts where appropriate.

In addition to the above, the purpose of this code is to ensure that development involving operational works which is not assessed by local government is designed and located to protect life and property from the impacts of **storm tide inundation**.

Note: Guidance on achieving compliance with the performance outcomes and acceptable outcomes in the code is provided in the Guideline – SDAP State code 8: Coastal development and tidal works, Department of Environment and Heritage Protection, 2016. Guidance for determining if development will have a significant residual impact on a matter of state environmental significance is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014.

# 8.2 Performance outcomes and acceptable outcomes

All development should demonstrate compliance with the relevant provisions of table 8.2.1. Development involving operational work should also demonstrate compliance with the relevant provisions of table 8.2.2. Development involving operational work which is not assessed by local government should demonstrate compliance with the relevant provisions of table 8.2.1, table 8.2.2 and table 8.2.3.

Table 8.2.1: All development

Performance outcomes	Acceptable outcomes	
Development in the erosion prone area		
PO1 Development does not occur in the erosion	No acceptable outcome is prescribed.	
prone area unless the development:		
1. is one of the following types of development:		
<ul> <li>a. coastal-dependent development; or</li> </ul>		
b. temporary, readily relocatable or able to		
be abandoned; or		
c. essential community infrastructure; or		
d. <b>redevelopment</b> of an existing permanent		
building or structure that cannot be		
relocated or abandoned; and		
cannot feasibly be located elsewhere.		
PO2 Development other than coastal protection	No acceptable outcome is prescribed.	
work:		
<ol> <li>avoids impacting on coastal processes; and</li> </ol>		
2. ensures that the protective function of landforms		
and vegetation is maintained.		
Note: In considering reconfiguring a lot applications, the state		
may require land in the <b>erosion prone area</b> to be surrendered to		

Performance outcomes	Acceptable outcomes
the State for coastal management purposes under the Coastal	
Protection and Management Act 1995.	
Where the planning chief evecutive receives a convert a land	
Where the planning chief executive receives a copy of a land surrender requirement or proposed land surrender notice under	
the Coastal Protection and Management Act 1995, this must be	
considered in assessing the application.	
PO3 Development is located, designed and	No acceptable outcome is prescribed.
constructed to minimise the impacts from coastal	
erosion by:	
locating the development as far landward as	
practicable; or	
2. where it is demonstrated that 1 is not feasible,	
mitigate or otherwise accommodate the risks	
posed by <b>coastal erosion</b> .	
PO4 Development does not significantly increase	No acceptable outcome is prescribed.
the risk or impacts to people and property from	The decoprision outlooms to proceed the
coastal erosion.	
PO5 Development other than coastal protection	No acceptable outcome is prescribed.
work avoids directly or indirectly increasing the	The acceptable outcome is presented.
severity of coastal erosion either on or off the site.	
PO6 In areas where a coastal building line is	No acceptable outcome is prescribed
	No acceptable outcome is prescribed.
present, building work is located landward of the	
coastal building line unless coastal protection	
work has been constructed to protect the	
development.	
Artificial waterways	Tax and the same of the same o
PO7 Development of artificial waterways, canals	No acceptable outcome is prescribed.
and dry-land marinas minimises impacts on	
coastal resources by:	
1. maintaining the <b>tidal prism volume</b> of the	
natural waterway to which it is connected	
demonstrating a whole-of-life strategy for the	
disposal of dredged material.	
Coastal protection work	
PO8 Works for beach nourishment minimise	No acceptable outcome is prescribed.
adverse impacts on <b>coastal processes</b> and avoid	
any increase in the severity of erosion on adjacent	
land by:	
sourcing sand from an area that does not	
adversely impact on the active beach system	
2. ensuring imported sand is compatible with	
natural beach sediments and coastal	
processes of the receiving beach.	
PO9 Erosion control structures are only	No acceptable outcome is prescribed.
constructed where there is an imminent threat to	The acceptable catedine is precented.
buildings or infrastructure of value, and there is no	
feasible option for either:	
beach nourishment; or	
2. relocation or abandonment of structures.	
2. Telocation of abandonment of structures.	
Statutory note: The monetary value of buildings or infrastructure	
should be more than the cost of associated erosion control	
structures.	
PO10 Erosion control structures minimise	No acceptable outcome is prescribed.
interference with coastal processes, or any	·
increase to the severity of erosion on adjacent land	
by:	
L *	•

Performance outcomes	Acceptable outcomes
locating the <b>erosion control structure</b> as far	- Acocptable outcomes
landward as practicable and directly adjacent to	
the structure it is intended to protect	
where required and feasible, importing sand to	
the site to mitigate any increase in the severity	
of erosion	
3. the design of the structure.	
Water quality	
PO11 Development:	No acceptable outcome is prescribed.
<ol> <li>maintains or enhances environmental values</li> </ol>	
of receiving waters	
2. achieves the water quality objectives of	
Queensland waters	
3. avoids the release of <b>prescribed water</b>	
contaminants to tidal waters.	
Note: See Environmental Protection (Water) Policy 2009 for the	
relevant water quality objectives.	
Category C and R areas of vegetation	
PO12 Development:	No acceptable outcome is prescribed.
1. avoids impacts on category C areas of	•
vegetation and category R areas of vegetation;	
or	
2. minimises and mitigates impacts on category C	
areas of vegetation and category R areas of	
vegetation after demonstrating avoidance is not	
reasonably possible.	
Public use of and access to state coastal land	No secontable sutering to the 21 of
PO13 Development maintains or enhances public	No acceptable outcome is prescribed.
use of and access to and along state coastal land	
(except where this is contrary to the protection of <b>coastal resources</b> or public safety).	
PO14 Private marine development ensures that	No acceptable outcome is prescribed.
works:	The acceptable dated no broschbod.
are used for marine access purposes only	
2. minimise the use of state coastal land	
3. do not interfere with access between <b>navigable</b>	
waterways and adjacent properties.	
PO15 Development ensures erosion control	No acceptable outcome is prescribed.
<b>structures</b> are located within the premises they are	•
intended to protect unless there is no feasible	
alternative.	
Matters of state environmental significance	
PO16 Development:	No acceptable outcome is prescribed.
avoids impacts on matters of state	
environmental significance; or	
2. minimises and mitigates impacts on matters of	
state environmental significance after	
demonstrating avoidance is not reasonably	
possible; and	
3. provides an <b>offset</b> if, after demonstrating all	
reasonable avoidance, minimisation and mitigation measures are undertaken, the	
development results in an acceptable	
significant residual impact on a matter of	
state environmental significance.	
State chivinoniniental significance.	
Statutory note: For Brisbane core port land, an offset may only be	
applied to development on land identified as E1	

Performance outcomes	Acceptable outcomes
Conservation/Buffer, E2 Open Space or Buffer/Investigation in the Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see www.portbris.com.au.	
Note: Guidance for determining if the development will have a significant residual impact on the matter of state environmental significance is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014. Where the significant residual impact is considered an acceptable impact on the matter of state environmental significance and an offset is considered appropriate, the offset should be delivered in accordance with the Environmental Offsets Act 2004.	

Table 8.2.2: All operational work

Table 8.2.2: All operational work		
Perf	ormance outcomes	Acceptable outcomes
Priva	ate marine development	
PO17	7 Private marine development does not	No acceptable outcome is prescribed.
requi	ire the construction of coastal protection work,	
shore	eline or riverbank hardening or <b>dredging</b> for	
mari	ne access purposes.	
Disp	osal of solid waste or dredged material from a	rtificial waterways
PO18	8 Solid waste from land and dredged material	No acceptable outcome is prescribed.
from	artificial waterways is not disposed of in tidal	
wate	er unless it is for beneficial reuse.	
Disp	osal of dredged material other than from artifi	cial waterways
PO19	9 Dredged material is returned to tidal water	No acceptable outcome is prescribed.
wher	re this is needed to maintain coastal processes	·
and s	sediment volume.	
PO2	Where it is not needed to maintain coastal	No acceptable outcome is prescribed.
proc	esses and sediment volume, the quantity of	, ·
dred	ged material disposed to tidal water is	
minir	mised through <b>beneficial reuse</b> or disposal on	
land.		
All d	redging and any disposal of dredged material	in tidal water
	1 All dredging and any disposal of dredged	No acceptable outcome is prescribed.
mate	erial in tidal water is:	·
1. c	demonstrated to be safe with regard to	
p	protection of the marine environment and by	
r	meeting the National Assessment Guidelines for	
	Dredging 2009, Department of Environment and	
	Energy, 2009, or later version; and	
	supported by a monitoring and management	
	plan that protects the marine environment and	
	hat complies with the National Assessment	
	Guidelines for Dredging 2009, Department of	
	Environment and Energy, 2009, or later version.	
	amation	
	2 Development does not involve reclamation of	No acceptable outcome is prescribed.
	below tidal water, other than for the purposes	
of:		
	coastal-dependent development, public	
	narine development or community	
	nfrastructure; or	
	strategic ports, priority ports, boat harbours or	
	strategic airports and aviation facilities, in	
	accordance with a statutory land use plan or	
	master plan, where there is a demonstrated net	
	penefit for the state or region and no feasible	
a	alternative exists; or	

Performance outcomes	Acceptable outcomes
<ol> <li>coastal protection work or work necessary to protect coastal resources or coastal processes.</li> </ol>	

#### Table 8.2.3: Operational work which is not assessed by local government

Performance outcomes	Acceptable outcomes
PO23 Works are located and designed such that	AO23.1 Tidal work is designed and located in
they continue to operate safely during and following	accordance with the Guideline: Building and
a defined storm tide event.	engineering standards for tidal works, Department of
	Environment and Heritage Protection, 2017.

### 8.3 Reference documents

Department of Environment and Energy 2009, National Assessment Guidelines for Dredging 2009

Department of Environment and Heritage Protection 2016, Environmental offsets framework documents

Department of Environment and Heritage Protection 2017, Guideline – SDAP State code 8: Coastal development and tidal works

Department of Environment and Heritage Protection 2017, Guideline: Building and engineering standards for tidal works

Department of State Development, Infrastructure and Planning 2014, Significant Residual Impact Guideline

# 8.4 Glossary of terms

Artificial waterway see section 8 of the Coastal Protection and Management Act 1995.

Note: Artificial waterway means an artificial channel, lake or other body of water. An artificial waterway includes:

- an access channel
- 2. an artificial channel that is formed because land has been reclaimed from **tidal water** and is intended to allow boating access to allotments on subdivided land
- 3. other artificial channels subject to the ebb and flow of the tide
- any additions or alterations to an artificial waterway.

However, an artificial waterway does not include the following:

- a swimming pool
- 2. an ornamental pond of no more than 5 000 square metres in area
- 3. a pond for aquaculture or for treating effluent
- 4. a freshwater storage reservoir for domestic water supply
- 5. a water storage facility situated on a natural watercourse and used for irrigation or other agricultural purposes
- 6. a part of a river, creek or stream in which water flows in a natural channel, whether artificially improved or not
- 7. a drain for carrying stormwater or other material
- 3. any of the following used for accessing port infrastructure if constructed in the area of a port for which a port authority or port operator is responsible:
  - a. a navigation channel
  - b. a harbour swing basin
  - c. a berth pocket
  - d. a berth approach or departure path.

**Beach nourishment** means the replenishment of a beach system using imported sediment to balance erosion losses or to re-establish a wider beach and dune system. It does not include the creation of a new beach.

**Beneficial reuse** means using **dredged material** for a purpose that provides social, economic or environmental benefits (or a combination of these). It includes **beach nourishment**, **reclamation**, environmental restoration purposes (such as restoring wetlands or nesting islands) and use on land for fill or construction purposes.

**Category C areas** means areas of high value regrowth vegetation classed as 'endangered' or 'of concern' under the *Vegetation Management Act 1999* that are shown on the regulated vegetation management map as **category C areas**.

**Category R areas** means regrowth watercourse and drainage feature areas under the *Vegetation Management Act 1999* that are shown on the regulated vegetation management map as **category R areas**.

Coastal building line see the Coastal Protection and Management Act 1995.

Note: Coastal building line means a line declared as a coastal building line under the Coastal Protection and Management Act 1995.

#### **Coastal-dependent development:**

- 1. means development that in order to function must be located in **tidal waters** or be able to access **tidal water**; and
- 2. may include, but is not limited to:
  - a. industrial and commercial facilities such as ports, harbours and navigation channels and facilities, aquaculture involving marine species, desalination plants, tidal generators, coastal protection works, erosion control structures, public marine development and beach nourishment
  - b. tourism facilities for marine (boating) purposes
  - c. community facilities and sporting facilities which require access to **tidal water** in order to function, such as surf clubs, marine rescue, rowing and sailing clubs; or
  - d. co-located residential and tourist uses that are part of an integrated development proposal (e.g. mixed use development) incorporating a marina, if these uses are located directly landward of the marina and appropriately protected from natural hazards; but
- 3. does not include:
  - a. residential development, including canal development, as the primary use
  - b. waste management facilities, such as landfills, sewerage treatment plants; or
  - c. transport infrastructure, other than for access to the coast.

**Coastal erosion** means the loss of land or the removal of beach or dune sediments by wave action, wind action, tidal currents or water flows or by permanent inundation due to **sea level rise**.

Coastal management district see the Planning Regulation 2017.

Note: Coastal management district means a coastal management district under the Coastal Protection and Management Act 1995, other than an area declared under section 54(2) of that Act.

Coastal processes means the natural processes of the coast, including:

- 1. sediment transport to and along the coast
- 2. wind, waves, tides and currents which transfer energy to the coast and drive sediment transport
- 3. fluctuations in the location and form of landforms and the foreshore and associated ecosystems from sediment transport (erosion and land building); and
- 4. changes in sea level; ecological processes (including growth and spread of native plants); and the natural water cycle (for example coastal wetlands' role in filtration and flood mitigation).

Coastal protection work means any permanent or periodic work undertaken primarily to manage the impacts of coastal erosion or storm tide inundation, including the use of erosion control structures and altering coastal processes such as sediment transport.

**Coastal resources** means the natural resources of the coastal zone. It includes natural and physical features and landforms, **coastal processes**, vegetation, wildlife, the marine environment, quarry material, soil, water and air.

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA mapping system** is available on the department's website.

**Defined storm tide event (DSTE)** means the event, measured in terms of likelihood of reoccurrence, and associated inundation level adopted to manage the development of a particular area. The DSTE is equivalent to a one in 100 year average recurrence interval storm event incorporating:

- 1. sea level rise; and
- 2. an increase in cyclone intensity by 10 percent relative to maximum potential intensity.

Note: Where **storm tide inundation** levels have not been determined by a local study, the **defined storm tide event level** can be determined by reference to default **storm tide inundation** area mapping, as depicted in the **DA mapping system**. In these mapping layers, **storm tide inundation** is based on default values of 1.5 metres above highest astronomical tide (HAT) for South East

Queensland and 2.0 metres above HAT for the remainder of the state. Where required, the storm tide level can be related back to Australian Height Datum by reference to the Queensland Tide Tables.

Defined storm tide event level means the peak water level reached during a defined storm tide event.

**Dredged material** means mud, sand, coral, shingle, gravel, clay, earth and other material removed by **dredging** from the bed in **tidal water**. Dredged material includes **dredge spoil**, quarry material where it is removed from **tidal water** as a commercial product and sand dredged for **beach nourishment**.

**Dredging** means the mechanical removal of **dredged material** from below **tidal water**. It excludes minor adjustments to the bed surface to level troughs and peaks and where bed material is only redistributed locally (bed levelling).

Dry-land marina means a marina created by the excavation of land above the high water mark.

Environmental value see the Environmental Protection Act 1994.

Note: Environmental value means:

- 1. a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- 2. another quality of the environment identified and declared to be an **environmental value** under an environmental protection policy or regulation.

The Environmental Protection (Water) Policy 2009 states the environmental values of waters.

**Erosion control structure** means a structure designed to protect land or to permanently alter sediment transport processes and includes a structure such as a seawall or revetment (rock walls), groyne, artificial reef, or breakwater.

**Erosion prone area** means an area declared to be an **erosion prone area** under section 70(1) of the *Coastal Protection and Management Act 1995.* 

Note: The **erosion prone area** is indicatively shown on the **DA mapping system**.

**Erosion prone areas** are identified in accordance with the methodology set out in the Coastal Hazard Technical Guide, Department of Environment and Heritage Protection, 2013 and use the following factors to account for the projected impacts of climate change by the year 2100:

- 1. a sea level rise factor of 0.8 metres
- 2. an increase in the maximum cyclone intensity by 10 percent.

#### Essential community infrastructure includes:

- 1. emergency services infrastructure
- 2. emergency shelters
- 3. police facilities
- 4. hospitals and associated facilities
- 5. stores of valuable records or heritage items
- 6. infrastructure forming part of the electricity transmission grid or supply network
- 7. communications facilities
- 8. sewerage treatment plants
- 9. water treatment plants.

**Marine access purpose** means a structure in **tidal water** used to facilitate vessel access for people between land and a **navigable waterway**. This includes jetties, pontoons and boat ramps but excludes decks and boardwalks.

Matters of state environmental significance see schedule 2 of the Environmental Offsets Regulation 2014.

Note: Matters of state environmental significance are prescribed environmental matters under the Environmental Offsets Regulation 2014 that require an offset when a prescribed activity will have a significant residual impact on the matter. A matter of state environmental significance is any of the following matters:

- 1. regional ecosystems under the Vegetation Management Act 1999 that:
  - a. are endangered regional ecosystems
  - b. are of concern regional ecosystems
  - c. intersect with a wetland shown on the vegetation management wetlands map
  - d. contain areas of essential habitat shown on the essential habitat map for an animal that is endangered wildlife or vulnerable wildlife or a plant that is endangered wildlife or vulnerable wildlife
  - e. are located within the defined distances stated in the Environmental Offsets Policy 2014 from the defining banks of a relevant watercourse or drainage feature as shown on the vegetation management watercourse and drainage feature map
  - f. contain remnant vegetation and are areas of land determined to be required for ecosystem functioning ('connectivity areas')

- wetlands in a wetland protection area or wetlands of high ecological significance shown on the Map of referable wetlands under the Environmental Protection Regulation 2008
- 3. wetlands and watercourses in high ecological value waters as defined in schedule 2 of the Environmental Protection (Water) Policy
- 4. designated precincts in strategic environmental areas under the Regional Planning Interests Regulation 2014
- threatened wildlife under the Nature Conservation Act 1992 and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006
- 6. protected areas under the Nature Conservation Act 1992 excluding coordinated conservation areas
- 7. highly protected zones of state marine parks under the Marine Parks Act 2004
- 8. declared fish habitat areas under the Fisheries Act 1994
- 9. waterways that provide for fish passage under the *Fisheries Act 1994* if the construction, installation or modification of waterway barrier works carried will limit the passage of fish along the waterway
- 10. marine plants under the Fisheries Act 1994
- 11. legally secured offset areas.

**Navigable waterway** means waters with a sufficient depth and width to allow safe passage by all vessel sizes and types that frequently use the area.

#### Offset means environmental offset under the Environmental Offsets Act 2014.

Note: Environmental **offset** means an activity undertaken to counterbalance a **significant residual impact** of a prescribed activity on a **prescribed environmental matter**, delivered in accordance with the Environmental offsets framework, Department of Environment and Heritage Protection, 2016. The **prescribed environmental matters** assessed under the SDAP are **matters of state environmental significance**.

#### Prescribed environmental matters see the Environmental Offsets Regulation 2014.

Note: A **prescribed environmental matter** is any species, ecosystem or other similar matter protected under Queensland legislation for which an environmental **offset** may be provided. A **prescribed environmental matter** may be a matter of national, state or local environmental significance, however, assessment criteria in the SDAP only relate to **matters of state environmental significance**. Each of the **prescribed environmental matters** are listed under the Environmental Offsets Regulation 2014.

#### Prescribed water contaminants see the Environmental Protection Act 1994.

Note: See schedule 9 of the Environmental Protection Regulation 2008 for a list of prescribed water contaminants.

**Private marine development** means a work for a non-commercial purpose attached to private land and extending over abutting **tidal water**.

Public marine development means development for public use that requires location in or adjacent to tidal water to function.

#### Reclamation see the Coastal Protection and Management Act 1995.

Note: **Reclamation** of land under **tidal water** means raising the land above the high water mark, whether gradually and imperceptibly or otherwise, by carrying out works, including **dredging** and the depositing of solid material.

**Redevelopment** means development that affects permanent built structures on an already developed site. Redevelopment includes the expansion of a building footprint or addition of a structure, reconstruction or remodelling an exterior, demolition and replacement of existing structures.

**Sea level rise** means an increase in sea level caused by global warming due to climate change. Sea level rise is projected to be 0.8 metres from the present day to 2100.

Note: Sea level rise projections based on the best available science are prepared by the Intergovernmental Panel on Climate Change.

#### Significant residual impact see the Environmental Offsets Act 2014.

Note: Significant residual impact is an impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that:

- 1. remains, or will or is likely to remain, (whether temporarily or permanently) despite on-site mitigation measures for the prescribed activity
- 2. is, or will or is likely to be, significant.

Guidance for determining if a prescribed activity will have a **significant residual impact** on a **matter of state environmental significance** is provided in the Significant Residual Impact Guideline, Department State Development, Infrastructure and Planning, 2014.

#### State coastal land see the Coastal Protection and Management Act 1995.

Note: State coastal land means land in a coastal management district other than land that is:

- 1. freehold land, or land contracted to be granted in fee simple by the state; or
- 2. a state forest or timber reserve under the Forestry Act 1959, or
- 3. in a watercourse or lake as defined under the *Water Act 2000*; or
- 4. subject to a lease or licence issued by the state.

State coastal land includes land that is, or is at any time, covered by tidal water.

**Storm tide inundation** means temporary inundation of land by abnormally high ocean levels caused by cyclones and severe storms.

**Temporary, readily relocatable or able to be abandoned** means a structure that, if threatened by **coastal erosion**, will be relocated, removed or allowed to be lost rather than protected from the impacts because it is:

- 1. of low economic value; and
- 2. is capable of being disassembled, is easily removed, or loss by erosion is of low consequence; and
- 3. is not an intrinsic part of infrastructure or will have high social value or need; or
- 4. intended to remain in place for only a short period and then removed, whether or not it is threatened by **coastal erosion**.

**Tidal prism volume** means the volume of water for a specified area between the mean high water springs and mean low water springs tidal planes, or the volume of water leaving an estuary during the ebb tide.

**Tidal water** see the Coastal Protection and Management Act 1995.

Note: Tidal water means:

- 1. the sea and any part of a harbour or watercourse ordinarily within the ebb and flow of the tide at spring tides; or
- 2. the water downstream from a downstream limit as defined under the Water Act 2000.

**Water quality objectives** means the numerical concentration limits, mass or volume limits per unit of time or narrative statements of indicators established for waters to enhance or protection the **environmental values** for those waters set out in:

- 1. schedule 1 of the Environmental Protection (Water) Policy 2009, for water mentioned in the policy; or
- 2. otherwise, the Queensland Water Quality Guidelines 2009.

# State code 9: Great Barrier Reef wetland protection areas

### 9.1 Purpose statement

The purpose of this code is to ensure that development involving **high impact earthworks** in a **wetland protection area** is located outside of a **wetland** and:

- 1. is designed, constructed and operated to enhance or protect wetland environmental values; or
- 2. is designed, constructed and operated to avoid or mitigate adverse impacts on **wetland environmental values**; or
- demonstrates that after all reasonable impact avoidance measures have been, or will be, undertaken, the development constitutes an acceptable impact on wetland environmental values; or
- 4. avoids impacts on **matters of state environmental significance**, and where avoidance is not reasonably possible, minimises and mitigates impacts, and provides an **offset** for **significant residual impacts** where appropriate.

Note: A document to provide guidance on how to comply with the performance outcomes of this code is currently being drafted by the Department of Environment and Heritage Protection and will be available soon. Guidance for determining if development will have a **significant residual impact** on a **matter of state environmental significance** is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014.

# 9.2 Performance outcomes and acceptable outcomes

Development that is operational works, a material change of use or reconfiguration of a lot involving **high impact earthworks** in a **wetland protection area** should demonstrate compliance with the relevant provisions in table 9.2.1.

Table 9.2.1: All development

Table 3:2:1: All development		
Performance outcomes	Acceptable outcomes	
General		
PO1 Development is not carried out in a wetland in	No acceptable outcome is prescribed.	
a wetland protection area.		
PO2 Development provides an adequate buffer	AO2.1 The buffer surrounding a wetland has a	
surrounding a <b>wetland</b> to:	minimum width of:	
maintain and protect wetland environmental	1. 200 metres, where the <b>wetland</b> is located	
values; and	outside a <b>prescribed urban area</b> ; or	
avoid adverse impacts on native vegetation	2. 50 metres, where the <b>wetland</b> is located within a	
within the <b>wetland</b> and the <b>buffer</b> .	prescribed urban area.	
Hydrology		
PO3 Development enhances or avoids adverse	No acceptable outcome is prescribed.	
impacts on the existing surface and groundwater		
hydrology in a wetland protection area, and, where		
adverse impacts cannot be reasonably avoided,		
impacts are mitigated.		
Water quality		
PO4 Development avoids adverse impacts to the	No acceptable outcome is prescribed.	
water quality of the wetland in the wetland		
protection area and in the wetland buffer and		
where adverse impacts cannot be reasonably		
avoided, impacts are mitigated.		
PO5 Development does not use the wetland in the	No acceptable outcome is prescribed.	
wetland protection area for stormwater treatment.		

Pe	rformance outcomes	Acceptable outcomes
	nd degradation	
we de	6 Development avoids land degradation in the tland protection area and, where land gradation cannot be reasonably avoided, it is igated.	No acceptable outcome is prescribed.
	getation	
PO bu	77 Development outside the wetland and its ffer: avoids impacts on category C areas of	No acceptable outcome is prescribed.
2.	vegetation and category R areas of vegetation; or minimises and mitigates impacts on category C	
	areas of vegetation and category R areas of vegetation after demonstrating avoidance is not reasonably possible.	
	una management	
1.	Development: protects wetland fauna from any impacts associated with noise, light or visual	No acceptable outcome is prescribed.
2.	disturbance protects the movement of wetland fauna within	
3.	and through a <b>wetland protection area</b> ; and does not introduce pest plants, pest animals or exotic species into a <b>wetland</b> and its <b>buffer</b> .	
Ma	tters of state environmental significance	
	9 Development outside the wetland:	No acceptable outcome is prescribed.
2.	minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and	
3.	provides an <b>offset</b> if, after demonstrating all reasonable avoidance minimisation and mitigation measures are undertaken, the development results in an acceptable <b>significant residual impact</b> on a <b>matter of</b>	
	state environmental significance.	
sigi env Res Infra resi mat	e: Guidance for determining if the development will have a nificant residual impact on the matter of state vironmental significance is provided in the Significant sidual Impact Guideline, Department of State Development, astructure and Planning, 2014. Where the significant idual impact is considered an acceptable impact on the ter of state environmental significance and an offset is sidered appropriate, the offset should be delivered in ordance with the Environmental Offsets Act 2004.	

## 9.3 Reference documents

Department of Environment and Heritage Protection 2016, Environmental offsets framework documents

Department of Environment and Heritage Protection 2016, State Development Assessment Provisions Guideline: State code 9: Wetland protection areas

Department of State Development, Infrastructure and Planning 2016, State Planning Policy

Department of State Development, Infrastructure and Planning 2014, Significant Residual Impact Guideline

# 9.4 Glossary of terms

**Buffer** means the transition zone between a **wetland** and any surrounding land use that supports the values and processes of the **wetland** and protects it from external threats.

**Category C areas** means areas of high value regrowth **vegetation** classed as 'endangered' or 'of concern' under the *Vegetation Management Act 1999* that are shown on the regulated **vegetation** management map as **category C areas**.

Category R areas means regrowth watercourse and drainage feature areas under the *Vegetation*Management Act 1999 that are shown on the regulated **vegetation** management map as **category R areas**.

**Environmental values**, for **wetlands**, means values declared under section 81A of the Environmental Protection Regulation 2008 to be the **environmental values** for **wetlands**.

Note: From the Environmental Protection Act 1994, environmental value means:

- 1. a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- 2. another quality of the environment identified and declared to be an **environmental value** under an environmental protection policy or regulation.

Exotic species means all non-native and non-endemic flora and fauna, including domestic pets.

High impact earthworks see schedule 24 of the Planning Regulation 2017.

Note: High impact earthworks means operational work that:

- changes the form of land, or involves placing a structure on land, in a way that diverts water to or from a wetland in a wetland protection area; and
- 2. involves excavating or filling:
  - a. if the work is carried out in the **wetland** or within 200 metres of the **wetland** more than 100m<sup>3</sup>; or
  - b. otherwise more than 1000m<sup>3</sup>.

However, high impact earthworks does not include operational work that is:

- 1. excavating to establish underground infrastructure, other than infrastructure for drainage or stormwater flows, if the excavated land is to be restored, as far as practicable, to its original contours after the infrastructure is established; or
- 2. carried out for the maintenance of dams, fences, helipads, roads, stockyards, vehicular tracks or watering facilities; or
- 3. carried out for any of the following in relation to government supported transport infrastructure:
  - a. the maintenance, servicing or repair of the infrastructure
  - b. the replacement, rehabilitation, removal or alteration of the infrastructure
  - c. the taking of preventative or remedial action
  - d. the maintenance of systems and services associated with the infrastructure; or
- 4. carried out:
  - a. in tidal water; or
  - b. for a forest practice; or
  - c. to reinstate earthworks destroyed by floods or landslides; or
  - d. to restore or conserve the ecological processes or hydrological functions of a wetland protection area; or
  - e. to laser level land without change to the previously levelled contours or slopes; or
  - f. for government supported transport infrastructure for which the funding and construction arrangements were approved by the state or Commonwealth before 31 October 2011; or
- 5. carried out under:
  - a. the Electricity Act 1994, section 101 or 112A; or
  - b. the Fire and Emergency Services Act 1990, section 53, 68 or 69; or
  - c. a geothermal exploration permit under the Geothermal Energy Act 2010; or
- 6. assessable development under schedule 12 [Operational work that is assessable development] if the work is:
  - a. carried out completely or partly in a declared fish habitat area; or
  - b. constructing or raising waterway barrier works.

#### Land degradation means:

- 1. soil erosion; or
- 2. rising water tables; or
- the expression of salinity; or
- stream bank instability; or
- 5. a process that results in declining water quality, including acid sulfate soil disturbance.

Map of referable wetlands see schedule 12 of the Environmental Protection Regulation 2008.

Note: **Map of referable wetlands** means a document approved by the chief executive [Environment] on 4 November 2011 and published by the Department of Environment and Heritage Protection, as amended from time to time by the chief executive [Environment] under section 144D of the Environmental Protection Regulation 2008.

Matters of state environmental significance see schedule 2 of the Environmental Offsets Regulation 2014.

Note: Matters of state environmental significance are prescribed environmental matters under the Environmental Offsets Regulation 2014 that require an offset when a prescribed activity will have a significant residual impact on the matter. A matter of state environmental significance is any of the following matters:

- 1. regional ecosystems under the Vegetation Management Act 1999 that:
  - a. are endangered regional ecosystems
  - b. are of concern regional ecosystems
  - c. intersect with a **wetland** shown on the vegetation management wetlands map
  - d. contain areas of essential habitat shown on the essential habitat map for an animal that is endangered wildlife or vulnerable wildlife or a plant that is endangered wildlife or vulnerable wildlife
  - e. are located within the defined distances stated in the Environmental Offsets Policy, Department of Environment and Heritage Protection, 2014 from the defining banks of a relevant watercourse or drainage feature as shown on the vegetation management watercourse and drainage feature map
  - f. are areas of land determined to be required for ecosystem functioning ('connectivity areas')
- wetlands in a wetland protection area or wetlands of high ecological significance shown on the map of referable wetlands under the Environmental Protection Regulation 2008
- wetlands and watercourses in high ecological value waters as defined in schedule 2 of the Environmental Protection (Water) Policy 2009
- 4. designated precincts in strategic environmental areas under the Regional Planning Interests Regulation 2014
- threatened wildlife under the Nature Conservation Act 1992 and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006
- 6. protected areas under the Nature Conservation Act 1992, excluding coordinated conservation areas
- 7. highly protected zones of state marine parks under the Marine Parks Act 2004
- 8. declared fish habitat areas under the Fisheries Act 1994
- 9. waterways that provide for fish passage under the *Fisheries Act 1994* if the construction, installation or modification of waterway barrier works carried will limit the passage of fish along the waterway
- 10. marine plants under the Fisheries Act 1994; or
- 11. legally secured offset areas.

#### Offset means environmental offset under the Environmental Offsets Act 2014.

Note: Environmental **offset** means an activity undertaken to counterbalance a **significant residual impact** of a prescribed activity on a **prescribed environmental matter**, delivered in accordance with the Environmental offsets framework, Department of Environment and Heritage Protection, 2016. The **prescribed environmental matters** assessed under the State Development Assessment Provisions are **matters of state environmental significance**.

#### Prescribed environmental matter see the Environmental Offsets Regulation 2014.

Note: A **prescribed environmental matter** is any species, ecosystem or other similar matter protected under Queensland legislation for which an **offset** may be provided. A **prescribed environmental matter** may be a matter of national, state or local environmental significance, however, assessment criteria in the State Development Assessment Provisions only relate to **matters of state environmental significance**.

Each of the prescribed environmental matters are listed under the Environmental Offsets Regulation 2014.

#### Prescribed urban area

Note: Prescribed urban area for clearing native vegetation means:

- 1. an area identified in a gazette notice by the chief executive as an urban area; or
- 2. if no gazette notice has been published an area identified as an area intended specifically for urban purposes, including future urban purposes (but not rural residential or future rural residential purposes) on a map in a planning scheme that:
  - a. identifies the areas using cadastral boundaries
  - b. is used exclusively or primarily to assess development applications.

#### Significant residual impact see the Environmental Offsets Act 2014.

Note: Significant residual impact is an impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that:

- 1. remains, or will or is likely to remain, (whether temporarily or permanently) despite on-site mitigation measures for the prescribed activity
- 2. is, or will or is likely to be, significant.

Guidance for determining if a prescribed activity will have a **significant residual impact** on a **matter of state environmental significance** is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014

#### Vegetation includes all native vegetation, including:

- 1. vegetation as defined under the Vegetation Management Act 1999; or
- 2. grass and non-woody herbage; or
- 3. a plant within a grassland regional ecosystem prescribed under a regulation; or
- a mangrove.

**Visual disturbance** means the disturbance of fauna by visual intrusions that could lead to a loss or diminishment of key life cycle functions or changes to usage patterns of a **wetland** by mobile fauna (such as birds). This term include disturbance by people, pets or vehicles.

Note: Loss or diminishment of key life cycle may include, but is not limited to, nest abandonment or modified feeding patterns.

**Wetland** means an area shown as a **wetland** on the **map of referable wetlands** as defined within the Environmental Protection Regulation 2008.

**Wetland environmental values** means **environmental values** for **wetlands** described under section 81A of the Environmental Protection Regulation 2008. For section 9(b) of the *Environmental Protection Act 1994*, the qualities of a **wetland** that support and maintain the following are **environmental values**:

- 1. the health and biodiversity of the wetland's ecosystems
- 2. the wetland's natural state and biological integrity
- 3. the presence of distinct or unique features, plants or animals and their habitats, including threatened wildlife, near threatened wildlife and rare wildlife under the *Nature Conservation Act 1992*
- 4. the wetland's natural hydrological cycle
- 5. the natural interaction of the **wetland** with other ecosystems, including other **wetlands**.

Wetland fauna means species that have adapted to living in wetlands and are dependent on them for:

- 1. all of their life cycle; or
- 2. a major part of their life; or
- 3. critical stages of their life cycle, such as breeding and larval development.

**Wetland protection area** means an area shown as a **wetland** protection area on the **map of referable wetlands** as defined within the Environmental Protection Regulation 2008.

# State code 10: Taking or interfering with water

## 10.1 Purpose statement

The purpose of this code is to provide for the sustainable management of water by ensuring that development for taking or interfering with water:

- 1. maintains and where reasonably possible reverses degradation of:
  - a. natural ecosystem processes
  - b. riverine environment
  - c. underground water systems
  - d. physical integrity of watercourses
- 2. minimises adverse impacts on the:
  - a. connectivity between underground water and water in a watercourse, lake or spring
  - b. property of others
- 3. is consistent with the requirements of water planning instruments and authorities to take or interfere with water under the *Water Act 2000*
- 4. does not adversely impact the water security of other users and their access to the water resource
- 5. minimises the volume of **overland flow water** taken, consistent with the purpose of the development.

Note: Guidance on addressing code requirements is available in the State Development Assessment Provisions Guidance Material: State code 10: Taking or interfering with water, Department of Natural Resources and Mines, 2017.

## 10.2 Performance outcomes and acceptable outcomes

Development mentioned in table 10.2.1 should demonstrate compliance with the relevant provisions in table 10.2.2.

Table 10.2.1: Development and relevant provisions of the code

Development	Relevant provisions of the code
For works that take or interfere with water in a	Table 10.2.2 – General: PO1 – PO4
watercourse, lake or spring	
For works that take or interfere with underground	Table 10.2.2 – General: PO1 – PO4
water	Table 10.2.2 – Underground water: PO5 – PO6
For works that take <b>overland flow water</b> , where	Table 10.2.2 – General: PO1 – PO4
prescribed by regulation under the Water Act 2000	Table 10.2.2 – <b>Overland flow water</b> : PO7 – PO9
For works that take <b>overland flow water</b> , where the	Table 10.2.2 – General: PO1 – PO4
works are reconfiguring existing works	Table 10.2.2 – Overland flow water: PO7 – PO9
	Table 10.2.2 – Reconfiguring existing works: PO10
	– PO13
For works that take <b>overland flow water</b> in a limited	Table 10.2.2 – General: PO1 – PO4
catchment area identified in a water plan	Table 10.2.2 – Overland flow water: PO7 – PO9
	Table 10.2.2 – Limited catchment area: PO14
Note: Limited catchment areas are listed in table 10.3.1.	
For works that take <b>overland flow water</b> which is	Table 10.2.2 – General: PO1 – PO4
contaminated agricultural run-off water	Table 10.2.2 – Overland flow water: PO7 – PO9
	Table 10.2.2 – Contaminated agricultural run-off
	water: PO15
For works that take <b>overland flow water</b> as part of	Table 10.2.2 – General: PO1 – PO4
an environmentally relevant activity or under an	Table 10.2.2 – Overland flow water: PO7 – PO9
environmental authority	Table 10.2.2 – Environmentally relevant activity:
	PO16

Development	Relevant provisions of the code
For works that take <b>overland flow water</b> , incidental	Table 10.2.2 – General: PO1 – PO4
to capturing coal seam gas water	Table 10.2.2 – Overland flow water: PO7 – PO9
	Table 10.2.2 – Coal seam gas water: PO17
For works that take <b>overland flow water</b> , under a	Table 10.2.2 – General: PO1 – PO4
water entitlement	Table 10.2.2 – Overland flow water: PO7 – PO9
For works that take <b>overland flow water</b> for the	Table 10.2.2 – General: PO1 – PO4
purpose of water sensitive urban design, for	Table 10.2.2 – Overland flow water: PO7 – PO9
developments in urban areas	

Table 10.2.2: Operational works	Accountable outcomes
Performance outcomes	Acceptable outcomes
General	
PO1 Works do not adversely impact on the natural	No acceptable outcome is prescribed.
riverine ecosystem.	
PO2 Works do not adversely impact other users'	No acceptable outcome is prescribed.
ability to access the resource.	
PO3 Works do not adversely impact on the physical	No acceptable outcome is prescribed.
integrity of the watercourse.	
<b>PO4</b> Works are consistent with any of the following,	No acceptable outcome is prescribed.
to the extent they are relevant to the proposed	
development:	
1. a water plan	
2. a water management protocol	
3. a moratorium notice issued under the <i>Water Act</i>	
2000.	
Note: Moratorium notices are published on the Department of Natural Resources and Mines website.	
An example of a requirement in a <b>water plan</b> is a prescribed	
setback distance for new water bores from other existing water	
bores. These requirements will be different for each water plan.	
Underground water	
PO5 Works maintain the natural ecosystem	No acceptable outcome is prescribed.
processes of the underground water system.	
PO6 Works minimise impacts on connectivity	No acceptable outcome is prescribed.
between underground water and water in a	
watercourse, lake or spring.	
Overland flow water	
PO7 Works must not take overland flow water	No acceptable outcome is prescribed.
unless the works are:	·
1. for an activity prescribed by regulation under the	
Water Act 2000; or	
<ol><li>for reconfiguring existing works; or</li></ol>	
<ol><li>in a limited catchment area identified in a</li></ol>	
water plan; or	
4. for contaminated agricultural run-off water; or	
5. part of an <b>environmentally relevant activity</b> or	
under an <b>environmental authority</b> ; or	
6. incidental to capturing coal seam gas water; or	
7. consistent with a water entitlement; or	
8. for the purpose of water sensitive urban	
design; for developments in urban areas.	
PO8 Works minimise the impact on receiving waters	AO8.1 Works are in accordance with a certified
and neighbouring properties.	report, or the works are for:
	1. the taking of contaminated agricultural runoff
	water where the volume is less than the volume
	of the limited capacity identified in a water plan

Performance outcomes	Acceptable outcomes
PO9 Works are located, constructed and operated in a way that minimises adverse impacts on	<ol> <li>if no limited capacity is identified the capacity is less than 12 megalitres of contaminated agricultural run-off water; or</li> <li>taking for stock and domestic purposes; or</li> <li>taking overland flow water under a water entitlement.</li> </ol> AO9.1 Works are contained within the property boundaries.
neighbouring properties.	AND  AO9.2 At full supply level, the area inundated is contained within the property boundaries.
	AND
	AO9.3 Bywash resulting from the works and any water diverted away from contaminated areas exits the property as close as practicable to the same location to which it exited the property boundary prior to construction of the works.
Reconfiguring existing works	
<b>PO10</b> Construction of new works must not increase the overall take of <b>overland flow water</b> .	<ul> <li>AO10.1 Construction of new works must not result in an increase any of the following:</li> <li>the capacity of the works to store water; or</li> <li>the rate at which the works take water; or</li> <li>the average volume of water taken by the works.</li> </ul>
<b>PO11</b> Works must not involve reconfiguration of natural water bodies or bunded areas.	No acceptable outcome is prescribed.
<ul> <li>PO12 Works must not involve reconfiguration of the storage capacity of any of the following:</li> <li>1. a lake that was not used for irrigation or other intensive stocking or production; or</li> <li>2. land being used for irrigated or dryland agriculture or areas surrounded by levees designed to prevent the land becoming inundated; or</li> <li>3. naturally occurring infield storages.</li> </ul>	No acceptable outcome is prescribed.
PO13 New works must be located within the same	No acceptable outcome is prescribed.
premises as the existing works.	
Limited catchment area	
<ul> <li>PO14 In the limited catchment areas, any works for storing water must not:</li> <li>1. be larger than necessary for storing water other than overland flow water; or</li> <li>2. be able to take floodwater overflowing from any adjacent watercourse.</li> <li>Note: Limited catchment areas are listed in table 10.3.1.</li> </ul>	AO14.1 In the limited catchment areas, the incidental take of overland flow water:  1. is located within the subcatchment/management area listed in table 10.3.1, column 2 for the relevant limited catchment area; and  2. is stored in a local catchment area that is less than or equal to the area of the limited catchment area specified in table 10.3.1, column 3.
Contaminated agricultural run-off water	
PO15 Works to take contaminated agricultural run-off water must:  1. demonstrate that there is no alternative way to take the water by using or reconfiguring existing works	No acceptable outcome is prescribed.

Pa	rformance outcomes	Accentable outcomes	
2. 3. 4.	be no larger than necessary to contain contaminated agricultural run-off water or tailwater minimise the volume of water that becomes contaminated agricultural run-off water where practicable, allow for water that is not contaminated agricultural run-off water or tailwater to be passed through the works.	Acceptable outcomes	
indu <b>ma</b> ı	e: The design of the works should have regard to relevant ustry guidelines and best practice environmental nagement.		
En	vironmentally relevant activity		
ned rel	the Morks only capture overland flow water cessary for the operation of the environmentally evant activity or environmental authority under Environmental Protection Act 1994.	No acceptable outcome is prescribed.	
Co	Coal seam gas water		
	17 Any storage for the works must: be no larger than necessary to store coal seam gas water for the beneficial use of the resource under chapter 8 of the Waste Reduction and Recycling Act 2011	No acceptable outcome is prescribed.	
2.	minimise the volume of <b>overland flow water</b> taken		
3.	not be able to take <b>floodwater</b> from any adjacent <b>watercourse</b>		
4.	not contain <b>coal seam gas water</b> that could be stored in an existing alternative storage.		

### 10.3 Reference tables

Table 10.3.1: Limited catchment area parameters

Column 1: Water plan area	Column 2: Sub-catchment/	Column 3: Area of local
	management area	catchment
Fitzroy Basin	Fitzroy, Lower Mackenzie, Upper Mackenzie, Lower Dawson, Upper Dawson, Isaac Connors, Nogoa and Comet	250 hectares
Burnett Basin	Coastal Burnett Overland Flow Area	25 hectares

### 10.4 Reference documents

Queensland Government Business and Industry Portal 2015, Overland flow works that require certification

Department of Natural Resources and Mines 2017, State Development Assessment Provisions Guidance Material: State code 10: Taking or interfering with water

## 10.5 Glossary of terms

Beneficial use means the resource such as water has a beneficial use other than disposal. An example of beneficial use is reusing or recycling water.

**Best practice environmental management**, for an activity, see the *Environmental Protection Act 1994*. Note: The **best practice environmental management** of an activity is the management of the activity to achieve an ongoing minimisation of the activity's environmental harm through cost-effective measures assessed against the measures currently used nationally and internationally for the activity. In deciding the **best practice environmental management** of an activity, regard must be had to the following measures:

- 1. strategic planning by the person carrying out, or proposing to carry out, the activity
- 2. administrative systems put into effect by the person, including staff training and monitoring and review of the systems
- 3. public consultation carried out by the person
- 4. product and process design; and
- 5. waste prevention, treatment and disposal.

**Bywash** means water that is diverted from a dam or reservoir and is usually associated with a pipe or other structure to prevent uncontrolled overtopping.

#### Certified report means a report:

- 1. produced and certified by a person:
  - a. who is a Registered Professional Engineer of Queensland (RPEQ)
  - b. who has relevant farm water supply discipline experience if the proposed development is for agricultural production
- 2. that is prepared in accordance with or consideration of the information on **certified reports** provided on the Queensland Government Business and Industry Portal for 'overland flow works that require certification'.

**Coal seam gas water** means **underground water** brought to the surface of the earth or moved underground in connection with exploring for or producing coal seam gas.

Contaminated agricultural run-off water means overland flow water that contains, or is likely to contain, excess nutrients or farm chemicals at levels potentially harmful to the quality of water in a watercourse, lake or spring.

Environmental authority see the Environmental Protection Act 1994.

Note: **Environmental authority** means generally an **environmental authority** issued under section 195 of the *Environmental Protection Act 1994* that approves an **environmentally relevant activity** applied for in an application.

Environmentally relevant activity (ERA) see the Environmental Protection Act 1994.

Note: Each of the following is an environmentally relevant activity:

- 1. an agricultural ERA as defined under section 75 of the Environmental Protection Act 1994
- 2. a resource activity as defined under section 107 of the Environmental Protection Act 1994
- 3. an activity prescribed under section 19 of the Environmental Protection Act 1994 as an environmentally relevant activity.

**Existing works** means works that allow taking of **overland flow water** that are in existence at the time the relevant development application is made.

#### Floodwater see the Water Act 2000.

Note: **Floodwater**, in relation to a **watercourse** or **lake**, means water that has overflowed the outer banks of the **watercourse**, or the bed and banks of the **lake**, because of a flood event affecting the **watercourse** or **lake**, and is on land near the **watercourse** or **lake**.

**Incidental take of overland flow water** means to take **overland flow water** in a storage that is primarily for storing water from a source other than overland flow.

**Intensive stocking** means a technique of stocking land on a long term basis above what is normally considered to be the carrying capacity of the land, for example, by implementing strategic or rotational grazing.

Lake see schedule 4 of the Water Act 2000.

Note: Lake includes:

- 1. if a feature is identified on the watercourse identification map as a lake means the feature identified on the map; or
- 2. otherwise, includes:
  - a. a lagoon, swamp or other natural collection of water, whether permanent or intermittent
  - b. the bed and banks and any other element confining or containing the water.

#### Levee see schedule 4 of the Water Act 2000.

Note: Levee means an artificial embankment or structure which prevents or reduces the flow of **overland flow water** onto or from land. A **levee** includes **levee**-related infrastructure.

#### Overland flow water see schedule 4 of the Water Act 2000.

Note: Overland flow water:

- 1. means water, including **floodwater**, that is urban stormwater or is other water flowing over land, other than in a **watercourse** or **lake**:
  - a. after having fallen as rain or in any other way; or
  - after rising to the surface naturally from underground
- does not include:
  - a. water that has naturally infiltrated the soil in normal farming operations, including infiltration that has occurred in farming activity such as clearing, replanting and broadacre ploughing; or
  - b. tailwater from irrigation if the tailwater recycling meets best practice requirements; or
  - c. water collected from roofs for rainwater tanks.

Same premises means contiguous parcels of land or tenure under the same land ownership or tenure holder.

#### Spring see schedule 4 of the Water Act 2000.

Note: Spring means:

- 1. if a feature is identified on the watercourse identification map as a spring the feature identified on the map; or
- 2. otherwise the land to which water rises naturally from below the ground and the land over which the water then flows.

#### Underground water see schedule 4 of the Water Act 2000.

Note: Underground water means water that occurs naturally in, or is introduced artificially into, an aquifer.

#### Water entitlement see schedule 4 of the Water Act 2000.

Note: water entitlement means a water allocation, interim water allocation or water licence granted under the Water Act 2000.

#### Water plan see schedule 4 of the Water Act 2000.

Note: Water plan means a plan approved by the Governor in Council under section 48(1) of the Water Act 2000.

#### Water management protocol see schedule 4 of the Water Act 2000.

Note: Water management protocol means a protocol made by the chief executive under section 68 of the Water Act 2000.

Water sensitive urban design means design that integrates total water cycle management into the urban built form to minimise the effects of development on the natural water cycle and environmental values, and to address water supply and use.

Watercourse see schedule 4 of the Water Act 2000.

#### Note: A watercourse:

- 1. is a river, creek or other stream, including a stream in the form of an anabranch or a tributary, in which water flows permanently or intermittently, regardless of the frequency of flow events:
  - a. in a natural channel, whether artificially modified or not; or
  - b. in an artificial channel that has changed the course of the stream
- 2. includes any of the following located in it:
  - a. in-stream islands
  - b. benches
  - c. bars
- 3. does not, however, include a drainage feature
- 4. further, unless there is a contrary intention, a reference to a **watercourse** in the *Water Act 2000*, other than in section 5 or in the definitions in schedule 4 to the extent they support the operation of section 5, is a reference to anywhere that is:
  - a. upstream of the downstream limit of the watercourse
  - b. between the lateral limits of the watercourse
  - c. a reference to the Water Act 2000 to, or a to a circumstance that involves, land adjoining a watercourse, is a reference to, or a circumstance that involves, and effectively adjoining a watercourse.

Section 5AA of the *Water Act 2000* provides for the **watercourse** identification map that identifies the known extent of **watercourses** and drainage features that are managed under the *Water Act 2000*, and is available at the following link: www.business.qld.gov.au/industry/water/managing-accessing/accessing-water/authorisations/watercourse-map. Please be aware that the majority of minor **watercourses** and drainage features in Queensland have not yet been mapped, as indicated in the mapping, and therefore it should not be the only source of information that is relied upon when interpreting the SDAP provisions or identifying assessment triggers.

### 10.6 Abbreviations

RPEQ - Registered Professional Engineer of Queensland

# State code 11: Removal, destruction or damage of marine plants

## 11.1 Purpose statement

The purpose of the code is to ensure that development which involves the removal, destruction or damage of **marine plants**:

- maintains the extent, distribution, diversity and condition of marine plant communities and protects the ecological functions to which they contribute
- 2. maintains the health and productivity of fisheries resources and fish habitat
- 3. minimises impacts on the management, use, development and protection of **fisheries resources** and **fish habitat**
- 4. avoids impacts on marine plants that are matters of state environmental significance, and where avoidance is not reasonably possible, minimises and mitigates impacts, and provides an offset for significant residual impacts where appropriate.

Note: Marine plant protection under the Fisheries Act 1994 applies irrespective of the tenure.

Further information will be provided in the forthcoming guideline: State code 11: Removal, destruction or damage of marine plants, Department of Agriculture and Fisheries, 2017.

## 11.2 Performance outcomes and acceptable outcomes

Development that is a material change of use, reconfiguring of a lot or operational work which involves the removal, destruction or damage of a **marine plant** should demonstrate compliance with the relevant provisions of table 11.2.2. For further details of the specific performance outcomes to be addressed, please refer to table 11.2.1.

Note: Some development will be accepted development and will not require a development application and assessment against this code.

Table 11.2.1: Development type and relevant provisions of the code

Development	Relevant provisions of code
All development	Table 11.2.2 – PO1 – PO15
Private maritime infrastructure	Table 11.2.2 – PO16
Erosion control structures and beach replenishment	Table 11.2.2 – PO17 – PO22
Dredging	Table 11.2.2 – PO23 – PO25
Temporary works	Table 11.2.2 – PO26 – PO28
Restoration	Table 11.2.2 – PO29 – PO30
Matters of state environmental significance	Table 11.2.2 – PO31

Table 11.2.2: Operational works

Performance outcomes	Acceptable outcomes
All development	
PO1 There is a demonstrated need for the development, and alternatives (locations and designs) which do not involve removal, destruction	For development associated with a public health or safety purpose:
or damage of <b>marine plants</b> and impacts to <b>fisheries resources</b> and <b>fish habitats</b> are not viable.	<ul> <li>AO1.1 Development is for:</li> <li>signage or aids to warn the public of a safety hazard (for example, within a waterway to warn of submerged rocks, crocodiles, marine stingers); or</li> </ul>

Performance outcomes	Acceptable outcomes
	prevention of an impending public safety issue;
	or
	<ul> <li>3. the mitigation of a hazard to public safety that has resulted from a specific unforeseen event (for example, a fallen tree that is a danger to safe navigation); or</li> <li>4. placement of a cyclone mooring identified under</li> </ul>
	a cyclone contingency plan by the harbour master or controlling port authority, and is located in accordance with the plan; or 5. a public health purpose that has been endorsed
	in writing by Queensland Health or the relevant local government.
	For any other development, no acceptable outcome is prescribed.
	Note: The application should identify and document the impacts of alternative proposals.
<b>PO2</b> Only those aspects of a development that have a functional requirement to be located on <b>tidal land</b> create the requirement to remove, destroy or damage <b>marine plants</b> . Ancillary elements (for example: car and trailer parks, rest rooms, offices) occur outside of <b>tidal land</b> .	No acceptable outcome is prescribed.
Note: <b>Tidal land</b> within the development site should be accurately identified on plans provided with the application, together with the location of <b>highest astronomical tide</b> , mean high water spring and mean low water spring tide heights.	
The extent, location, species and condition of <b>marine plants</b> that are proposed for removal, damage or destruction and retained have been clearly and accurately identified and mapped to enable risks and impacts to be properly assessed.	
PO3 Development impacting marine plants: 1. directly abuts land that has full riparian access rights; or	No acceptable outcome is prescribed.
provides a public facility.	
Note: Further guidance on rights in context of <b>fisheries resources</b> and <b>fish habitats</b> is provided in the operational policy provisions of Management and protection of marine plants and other tidal fish habitats (FHMOP 001), Department of Primary Industries and Fisheries, 2007.	
The provision of owner's consent to lodge the development application does not confer rights.	
PO4 The spatial extent of disturbance to marine plants is minimised.	For work associated with private development that is a jetty, pontoon or boat ramp only:
Note: For more information, refer to relevant <b>fish habitat</b> management operational policies and <b>fish habitat</b> guidelines:	AO4.1 Only one structure adjoins the property.
Management and protection of marine plants and other tidal fish habitats (FHMOP 001), Department of Primary Industries and Fisheries, 2007	Note: A structure includes boat ramps, jetties and pontoons.
Tidal fish habitats, erosion control and beach replenishment (FHMOP 010), Department of Primary Industries and Fisheries, 2007	AND
Dredging, extraction and spoil disposal activities (FHMOP 004), Department of Primary Industries, 1998	AO4.2 The extent of marine plants removed, damaged or destroyed does not exceed 2 metres
Departmental procedures for permit applications assessment and approvals for insect pest control in wetlands (FHMOP 003), Department of Primary Industries, 1996	along the <b>waterway</b> frontage (width).
<ol> <li>Fisheries guidelines for fish-friendly structures (FHG 006), Department of Primary Industries and Fisheries, 2006.</li> </ol>	AND

Performance outcomes	Acceptable outcomes
- Tenormanice outcomes	AO4.3 The long-term use and and operability of the
	development will not result in ongoing adverse
	impacts or new adverse impacts or additional
	development. For example, a proposed jetty will not
	result in the need to dredge navigation access to the
	development in the future.
	·
	AND one of the following acceptable outcomes
	apply
	AO4.4 The extent of marine plant removal, damage
	or destruction for a jetty or pontoon development
	has a maximum:
	area of 30 square metres; and
	width of 2 metres along the shoreline (highest
	astronomical tide); and
	length of 15 metres from highest astronomical tide
	(measured perpendicular to the shore).
	OR
	AOA 5 The heat rame development has a maximum
	<b>AO4.5</b> The boat ramp development has a maximum development footprint of 45 square metres.
	development rootprint of 45 square metres.
	For any other development, no acceptable outcome
	is prescribed.
PO5 The timing of works avoids marine plant	No acceptable outcome is prescribed.
flowering, <b>fish</b> spawning and <b>fish</b> migration periods. <b>P06</b> Development of, or adjacent to, <b>fish habitats</b>	No acceptable outcome is prescribed.
avoids the unnecessary loss, degradation or	No acceptable outcome is prescribed.
fragmentation of <b>fish habitats</b> and their values and	
the loss of <b>fish</b> movement.	
Note: For more information, refer to relevant <b>fish habitat</b>	
management operational policies and <b>fish habitat</b> guidelines:  1. Management and protection of marine plants and other tidal	
fish habitats (FHMOP 001), Department of Primary	
Industries and Fisheries, 2007	
2. Tidal fish habitats, erosion control and beach replenishment (FHMOP 010), Department of Primary Industries and	
Fisheries, 2007	
Dredging, extraction and spoil disposal activities (FHMOP 004), Department of Primary Industries, 1998	
<ul><li>4. Department of Primary Industries, 1998</li><li>4. Departmental procedures for permit applications assessment</li></ul>	
and approvals for insect pest control in wetlands (FHMOP	
003), Department of Primary Industries, 1996	
5. Fisheries guidelines for fish-friendly structures (FHG 006), Department of Primary Industries and Fisheries, 2006.	
PO7 Development does not increase the risk of	No acceptable outcome is prescribed.
mortality, disease or injury, or compromise the	
health, productivity, marketability or suitability for	
human consumption of <b>fisheries resources</b> , having	
regard to (but not limited to):	
biotic and abiotic conditions, such as water and sediment quality.	
sediment quality 2. substances that are toxic to plants or toxic to or	
substances that are toxic to plants or toxic to or cumulative within <b>fish</b>	
3. design of structures	
design of structures     impacts on reproductive success	
5. effect on <b>fish</b> energy reserves	
6. whether <b>fish</b> may be physically damaged, killed,	
trapped or stranded	1

Performance outcomes	Acceptable outcomes
7. <b>fish</b> passage and access to habitats generally;	
and	
8. the impacts of pest <b>fish</b> and other relevant pest species.	
Note: A <b>fish</b> salvage plan may be required to demonstrate compliance with the performance outcome and may form a condition of any approval.	
Permits or other authorities may be required under the <i>Fisheries Act 1994</i> for the use of regulated <b>fishing</b> apparatus and to posess <b>fisheries resources</b> .	
<b>PO8</b> Works are undertaken to encourage <b>fish habitats</b> and <b>fisheries resource</b> values to naturally regenerate.	No acceptable outcome is prescribed.
Note: Substitution of <b>fish habitats</b> is not supported.	
A condition of approval for any <b>marine plant</b> restoration is likely to require a post-works monitoring and maintenance program appropriate for the scale of the restoration works.	
PO9 Development likely to cause drainage or disturbance to acid sulfate soils, prevents the release of contaminants and impacts on fisheries resources and fish habitats.	No acceptable outcome is prescribed.
Note: Management of acid sulfate soil is consistent with the current Queensland acid sulfate soil technical manual: Soil Management Guidelines v4.0, Department of Science, Information Technology, Innovation and the Arts, 2014.	
PO10 Tidal and freshwater inundation and drainage	For bridges:
patterns, extent and timing are maintained or	10404 5 11
restored such that ecological processes continue and associated <b>fish habitat</b> values and condition	<b>AO10.1</b> Bridges are designed with abutments above the <b>highest astronomical tide</b> .
are maintained.	AND
	For water, sewer or stormwater infrastructure:
	AO10.2 Infrastructure is placed below the existing natural substrate surface level, and natural substrate, surface levels and habitat condition and
	values are reinstated.
	For any other development, no acceptable outcome is prescribed.
PO11 Development:	No acceptable outcome is prescribed.
maintains natural processes of erosion and accretion unless there is an immediate and significant throat; and	
significant threat; and 2. does not result in increased risk of waterway bed or bank scour or erosion or shoreline or foreshore erosion.	
PO12 The development is designed, sited and	No acceptable outcome is prescribed.
constructed to ensure its long-term use and	,
operability will not result in ongoing adverse impacts	
or new adverse impacts or additional development	
including: 1. dredging to maintain access	
2. trimming of marine plants	
warning signs or protective structures.	

Performance outcomes	Acceptable outcomes
PO13 Development does not restrict or reduce	For development for a material change of use or
public use of or access to tidal land and	reconfiguration of a lot:
waterways (areas host to fisheries resources).	Trecomingulation of a lot.
water ways (areas most to fisheries resources).	AO13.1 Tidal land and fish habitats are separated
	from development and are available for <b>public use</b> .
	Trom development and are available for <b>public asc</b> .
	For any other development, no acceptable outcome
	is prescribed.
PO14 Development does not adversely impact on	AO14.1 The development does not alter existing
community access to <b>fisheries resources</b> and <b>fish</b>	infrastructure or existing community access
habitats including recreational and indigenous	arrangements.
fishing access.	arrangements.
lishing access.	
Note: In some cases, compensation for impact on <b>fisheries</b>	
access, operations and/or productivity may be necessary. The	
Guideline on fisheries adjustment provides advice for proponents	
on relevant <b>fisheries</b> adjustment processes and is available by	
request from the Department of Agriculture and Fisheries.	
PO15 Development does not adversely impact on	No acceptable outcome is prescribed.
commercial <b>fishing</b> access and linkages between a	
commercial <b>fishery</b> and infrastructure, services and	
facilities.	
Note: In some cases, compensation for impact on <b>fisheries</b>	
access, operations and/or productivity may be necessary. The	
Guideline on fisheries adjustment provides advice for proponents on relevant <b>fisheries</b> adjustment processes and is available by	
request from the Department of Agriculture and Fisheries.	
Private maritime infrastructure	
PO16 Evidence of a relevant development approval	No acceptable outcome is prescribed.
for the removal, damage or destruction or marine	γ
plants is required if a material change of use or	
reconfiguration of a lot occurred since 1 March 2005.	
Erosion control structures and beach replenishme	ent
PO17 Removal, destruction or damage to marine	No acceptable outcome is prescribed.
<b>plants</b> as a result of erosion control structures or	The deceptable editedine is presented.
beach replenishment only occurs where there is an	
immediate and significant threat of erosion to:	
the use of the <b>land</b> for its existing or approved	
purpose; and	
infrastructure, structures or buildings are not	
expendable or not able to be relocated.	
experidable of flot able to be felocated.	
Note: Further detail on erosion control is provided in Tidal fish	
habitats, erosion control and beach replenishment (FHMOP 010),	
Department of Primary Industries and Fisheries, 2007.	
PO18 The area that the beach replenishment is to	No acceptable outcome is prescribed.
be carried out on is a high-energy, sandy sediment	
shoreline with biological communities adapted to	
mobile sediments.	
PO19 Erosion control structures including beach	No acceptable outcome is prescribed.
replenishment does not create terrestrial <b>land</b> ,	,
unless it is a sacrificial dune or beach which forms	
an integral part of the erosion control design.	
PO20 The beach replenishment work is undertaken	No acceptable outcome is prescribed.
in a way that minimises the need for other erosion	The acceptance datedine is prescribed.
control activities or works.	
CONTROL ACTIVITIES OF WORKS.	

Dorformana autoamaa	Acceptable sutcemes
Performance outcomes	Acceptable outcomes
PO21 The beach replenishment work is undertaken	AO21.1 Beach replenishment will not require
in a way that minimises the frequency of any	maintenance more often than every two years.
ongoing replenishment requirements.	AND
	AND
	AO21.2 A source of replanishment material for
	AO21.2 A source of replenishment material for
DOOD Free in a section of the section is a section of the section	future maintenance is identified and secured.
PO22 Erosion control structures are located parallel	No acceptable outcome is prescribed.
to the shoreline and as far landward as possible to	
avoid impacts to <b>tidal land</b> and <b>marine plants</b> .	
Dredging	
PO23 Capital dredging is to create or provide	No acceptable outcome is prescribed.
access to public infrastructure.	assoptable satisfine to prosonbou.
access to public illitratifucture.	
Note:	
Privately owned marina facilities or maritime infrastructure	
development that is open to the general public and facilitates	
unrestricted <b>public use</b> for <b>fishing</b> purposes may be	
considered <b>public infrastructure</b> .  2. Dredging for access to private structures that do not provide	
unrestricted <b>public use</b> is not supported.	
PO24 Maintenance dredging is consistent with an	No acceptable outcome is prescribed.
existing development approval for dredging; and	
within approved profiles for navigational purposes.	
PO25 Disposal of dredge spoil avoids adverse	AO25.1 Dredge spoil is not deposited on tidal land.
impacts on marine plants.	
Temporary works	
PO26 Fish habitats and the fisheries resources	No acceptable outcome is prescribed.
they support are restored to pre-existing or improved	·
condition and extent when the temporary works has	
ceased.	
PO27 Temporary works will be in place or are	No acceptable outcome is prescribed.
undertaken for a specified period and for the	
shortest possible time.	
PO28 A temporary structure is in place for a	No acceptable outcome is prescribed.
specified period and is designed to be completely	·
removed.	
Restoration	
PO29 Restoration does not:	No acceptable outcome is prescribed.
1. compromise condition of <b>fish habitats</b> or	
fisheries productivity; or	
2. substitute a particular <b>fish habitat</b> for another	
type of habitat, for example, creation of	
mangrove communities from other tidal fish	
habitats; or	
3. substitute a natural <b>fish habitat</b> for artificial <b>fish</b>	
habitat; or	
4. deliver <b>fish habitats</b> that are likely to be	
regularly disturbed, such as through predictable	
sediment removal or maintenance dredging; or	
5. deliver <b>fish habitats</b> that will predictably be at a	
high risk of contamination and/or further	
disturbance.	
Note: For further guidance refer to Restoration of fish habitats:	
Fisheries guidelines for marine areas (FHG 002), Department of	
Primary Industries, 1998.	
	1

Performance outcomes	Acceptable outcomes
Restoration works authorised through an endorsed restoration plan under the code for self-assessable development MP06 – Minor impact works in a declared fish habitat area or involving the removal, destruction or damage of marine plants, Department of Agriculture, Fisheries and Forestry, 2013, do not require a development permit.	
PO30 Marine plants to be used for revegetation	PO30.1 Marine plants used in restoration works are
purposes have local provenance.	collected within a 100 kilometre radius of the site.
Matters of state environmental significance	
PO31 Development:	No acceptable outcome is prescribed.
<ol> <li>avoids impacts on matters of state         environmental significance; or</li> <li>minimises and mitigates impacts on matters of         state environmental significance after         demonstrating avoidance is not reasonably         possible; and</li> <li>provides an offset if, after demonstrating all         reasonable avoidance, minimisation and         mitigation measures are undertaken, the         development results in an acceptable         significant residual impact on a matter of         state environmental significance.</li> </ol>	
Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1 Conservation/Buffer, E2 Open Space or Buffer/Investigation in the Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see www.portbris.com.au.  Note: For the purpose of this code, the matter of state environmental significance assessed is marine plants under the Fisheries Act 1994.  Guidance for determining if the development will have a significant residual impact on the matter of state environmental significance is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014. Where the significant residual impact is considered an acceptable impact on the matter of state environmental significance under the Environmental Offsets framework and an offset is considered appropriate, the offset should be delivered in accordance with the Environmental Offsets Act 2014.	

### 11.3 Reference documents

Department of Agriculture and Fisheries 2017, State Development Assessment Provisions Guidance Material: State code 11: Removal, destruction or damage of marine plants

Department of Environment and Heritage Protection 2016, Environmental offsets framework documents

Department of Primary Industries 1998, Restoration of fish habitats: Fisheries guidelines for marine areas FHG 002

Department of National Parks, Sport and Racing 2005, Fish habitat area code of practice: The lawful use of physical, pesticide and biological controls in a declared fish habitat area

Department of Primary Industries 2000, Fisheries guidelines for fish habitat buffer zones FHG 003

Department of Primary Industries and Fisheries 2006, Fisheries guidelines for fish-friendly structures FHG 006

Department of State Development, Infrastructure and Planning 2014, Significant residual impact guideline

Local Government Association of Queensland 2012, Mosquito management code of practice

#### **Policies**

Department of National Parks, Sport and Racing 2013, Marine resource management: Fish habitat area selection, assessment, declaration and review

Department of National Parks, Sport and Racing 2015, Marine resource management: Management of declared fish habitat areas

Department of Primary Industries 1998, Departmental procedures for provision of fisheries comments: Dredging, Extraction and Spoil Disposal Activities (FHMOP 004)

Department of Primary Industries and Fisheries 2007, Management and protection of marine plants and other tidal fish habitats (FHMOP001)

Department of Primary Industries and Fisheries 2007, Tidal fish habitats, erosion control and beach replenishment (FHMOP010)

Department of Agriculture and Fisheries 2015, Oyster Industry Management Plan for Moreton Bay Marine Park

Ministerial Council on Forestry, Fisheries and Aquaculture 1999, National Policy for the Translocation of Live Aquatic Organisms – Issues, Principles and Guidelines for Implementation

Queensland Department of Primary Industries 1996, Departmental Procedures for Permit Applications Assessment and Approvals for Insect Pest Control in Coastal Wetlands (FHMOP 003)

#### **Accepted Development**

Department of Agriculture and Fisheries 2017, Accepted development requirements for operational work that is the removal, destruction or damage of marine plants

#### Other references

Department of Agriculture, Fisheries and Forestry 2013, Declared fish habitat area network assessment report 2012

Department of Agriculture, Fisheries and Forestry 2013, Guideline on fisheries adjustment as a result of development

Department of Agriculture and Fisheries website What is a waterway?

Department of Agriculture and Fisheries website What is a waterway barrier work?

Department of Agriculture and Fisheries website What is not a waterway barrier work?

Department of Employment, Economic Development and Innovation 2010, Declared fish habitat area network strategy 2009-14: Planning for the future of Queensland's declared fish habitat area network

Department of Environment and Heritage Protection 2014, Environmental offsets framework

Department of Environment and Resource Management 2011, Queensland Wetland Buffer Planning Guideline

Department of National Parks, Recreation, Sport and Racing 2013, Declared fish habitat area network progress report – June 2013

Department of National Parks, Recreation, Sport and Racing website Fish habitat area summaries

Department of Natural Resources and Mines 2002, Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines

International Ecohydraulics Symposium 2012, From Sea to Source: International guidance for the restoration of fish migration highways

International Erosion Control Association Australasia 2008, Best practice erosion and sediment control document

#### SEQ Catchments website

## 11.4 Glossary of terms

#### Declared fish habitat area see the Fisheries Act 1994.

Note: **Declared fish habitat area** means an area that is declared under the *Fisheries Act 1994* to be a **fish habitat** area. Section 120 of the *Fisheries Act 1994* deals with declaration of **fish habitat** areas.

#### Fish see section 5 of the Fisheries Act 1994.

Note: Fish:

- 1. means an animal (whether living or dead) of a species that throughout its life cycle usually lives:
  - a. in water (whether freshwater or saltwater); or
  - b. in or on foreshores; or
  - c. in or on land under water
- includes:
  - a. prawns, crayfish, rock lobsters, crabs and other crustaceans
  - b. scallops, oysters, pearl oysters and other molluscs
  - c. sponges, annelid worms, bêche-de-mer and other holothurians
  - d. trochus and green snails
- 3. does not include:
  - a. crocodiles, or
  - b. protected animals under the Nature Conservation Act 1992; or
  - c. pests under the Pest Management Act 2001; or
  - d. animals prescribed under a regulation not to be fish
- . also includes:
  - a. the spat, spawn and eggs of fish
  - b. any part of fish or spat, spawn or eggs of fish
  - c. treated fish, including treated spat, spawn and eggs of fish
  - d. coral, coral limestone, shell grit or star sand
  - e. freshwater or saltwater products declared under a regulation to be fish.

#### Fish habitat see the Fisheries Act 1994.

Note: Fish habitat includes land, waters and plants associated with the life cycle of fish, and includes land and waters not presently occupied by fisheries resources.

#### Fisheries resources see the Fisheries Act 1994.

Note: Fisheries resources includes fish and marine plants.

#### Fishery see section 7 of the Fisheries Act 1994.

Note: Fishery means activity by way of fishing, for example, activities specified by reference to all or any of the following:

- 1. a species of fish
- 2. a type of fish by reference to sex, size or age or another characteristic
- 3. an area
- 4. a way of fishing
- 5. a type of boat
- 6. a class of person
- 7. the purpose of an activity
- 3. the effect of the activity on a fish habitat, whether or not the activity involves fishing
- 9. anything else prescribed under a regulation.

#### Fishing see the Fisheries Act 1994.

Note: Fishing includes:

- 1. searching for, or taking, fish
- 2. attempting to search for, or take, fish
- 3. engaging in other activities that can reasonably be expected to result in the locating, or taking, of **fish**
- 4. landing fish (from a boat or in another way), bringing fish ashore or transhipping fish.

#### Foreshore see the Fisheries Act 1994.

Note: Foreshore means parts of the banks, beds, reefs, shoals, shore and other land between high water and low water.

Harbour master see the Transport Operations (Maritime Safety) Act 1994.

Note: Harbour master means a person who is appointed under the *Transport Operations (Marine Safety) Act 1994* as a harbour master.

**Highest astronomical tide** means the highest level of the tides that can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.

Land includes foreshores and tidal and non-tidal land.

#### Legally secured offset area see the Environmental Offsets Act 2014.

Note: An area of land is a legally secured offset area if:

- the area is:
  - a. an environmental offset protection area; or
  - b. an area declared as an area of high nature conservation value under section 19F of the Vegetation Management Act 1999; or
  - c. another area prescribed under a regulation; and
- 2. under the *Environmental Offsets Act 2014* or another Act, the area is subject to a delivery or management plan or agreement (however described in this Act or the other Act) to achieve a conservation outcome for a **prescribed environmental matter**.

#### Marine plant see section 8 of the Fisheries Act 1994.

Note: Marine plant includes the following:

- 1. a plant (a tidal plant) that usually grows on, or adjacent to, tidal land, whether it is living, dead, standing or fallen
- 2. material of a tidal plant, or other plant material on tidal land
- 3. a plant, or material of a plant, prescribed under a regulation or management plan to be a marine plant.

A marine plant does not include a plant that is a declared pest under the Land Protection (Pest and Stock Route Management) Act 2002.

## Matters of state environmental significance see schedule 2 of the Environmental Offsets Regulation 2014. Note: Matters of state environmental significance are prescribed environmental matters under the Environmental Offsets Regulation 2014 that require an offset when a prescribed activity will have a significant residual impact on the matter. A matter of state environmental significance is any of the following matters:

- 1. regional ecosystems under the Vegetation Management Act 1999 that:
  - a. are endangered regional ecosystems
  - b. are of concern regional ecosystems
  - c. intersect with a wetland shown on the vegetation management wetlands map
  - d. contain areas of essential habitat shown on the essential habitat map for an animal that is endangered wildlife or vulnerable wildlife or a plant that is endangered wildlife or vulnerable wildlife
  - e. are located within the defined distances stated in the Environmental Offsets Policy, Department of Environment and Heritage Protection 2014 from the defining banks of a relevant watercourse or drainage feature as shown on the vegetation management watercourse and drainage feature map; or
  - f. are areas of land determined to be required for ecosystem functioning ('connectivity areas'); or
- wetlands in a wetland protection area or wetlands of high ecological significance shown on the map of referable wetlands under the Environmental Protection Regulation 2008
- wetlands and watercourses in high ecological value waters as defined in schedule 2 of the Environmental Protection (Water) Policy 2009
- 4. designated precincts in strategic environmental areas under the Regional Planning Interests Regulation 2014
- threatened wildlife under the Nature Conservation Act 1992 and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006
- 6. protected areas under the Nature Conservation Act 1992, excluding coordinated conservation areas
- 7. highly protected zones of state marine parks under the Marine Parks Act 2004
- 8. declared fish habitat areas under the Fisheries Act 1994
- 9. **waterways** that provide for **fish** passage under the *Fisheries Act 1994* if the construction, installation or modification of **waterway** barrier works carried will limit the passage of **fish** along the **waterway**
- 10. **marine plants** under the *Fisheries Act 1994*; or
- 11. legally secured offset areas.

#### Offset means environmental offset under the Environmental Offsets Act 2014.

Note: Environmental **offset** means an activity undertaken to counterbalance a **significant residual impact** of a prescribed activity on a **prescribed environmental matter**, delivered in accordance with the Environmental offsets framework, Department of Environment and Heritage Protection, 2014. The **prescribed environmental matters** assessed under the State Development Assessment Provisions are **matters of state environmental significance**.

#### Prescribed environmental matters see the Environmental Offsets Act 2014.

Note: A **prescribed environmental matter** is any species, ecosystem or other similar matter protected under Queensland legislation for which an **offset** may be provided. A **prescribed environmental matter** may be a matter of national, state or local environmental significance, however, assessment criteria in the State Development Assessment Provisions only relate to **matters of state environmental significance**. Each of the **prescribed environmental matters** are listed under the Environmental Offsets Regulation 2014.

**Public infrastructure** means infrastructure constructed, owned and maintained by or on behalf of a **public sector entity**.

#### Public sector entity see the Planning Act 2016.

Note: A **public sector entity** means:

- 1. a department or part of a department; or
- 2. other than in chapter 4 (of the Planning Act 2016) a distributor-retailer; or
- an agency, authority, commission, committee, corporation (including a government owned corporation), instrumentality, office, or other entity, established under an Act for a public or state purpose (for example: a local government, a government owned corporation or a rail government entity under the *Transport Infrastructure Act 1994*).

Public use means available for free use by any member of the public without prior permission.

#### Significant residual impact see the Environmental Offsets Act 2014.

Note: Significant residual impact is an impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that:

- 1. remains, or will or is likely to remain, (whether temporarily or permanently) despite on-site mitigation measures for the prescribed activity
- 2. is, or will or is likely to be, significant.

Guidance for determining if a prescribed activity will have a **significant residual impact** on a **matter of state environmental significance** is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014.

#### Tidal land see the Fisheries Act 1994.

Note: Tidal land includes reefs, shoals and other land permanently or periodically submerged by waters subject to tidal influence.

#### Waterway see the Fisheries Act 1994.

Note: **Waterway** includes a river, creek, stream, watercourse or inlet of the sea. For further guidance see fact sheet Maintaining Fish Passage in Queensland: What is a waterway?, Department of Agriculture, Fisheries and Forestry, 2014.

# State code 12: Development in a declared fish habitat area

## 12.1 Purpose statement

The purpose of the code is to ensure development in a declared fish habitat area:

- 1. is limited to **prescribed development purposes** where there is a need for the development or the development will improve the condition of **fisheries resources**, **fish habitat** and natural processes
- 2. maintains the natural condition of fish habitat and natural processes in management A areas
- 3. maintains the current fish habitat values and functions of management B areas
- 4. maintains the community and fishing sector's use of the area and access to fisheries resources
- 5. avoids impacts on marine plants, waterways that provide for fish passage and declared fish habitat areas that are matters of state environmental significance, and where avoidance is not reasonably possible, minimises and mitigates impacts, and provides an offset for significant residual impacts where appropriate.

Note: In most cases, a **resource allocation authority** is required under the *Fisheries Act 1994* before development that will be assessable against this code can proceed. It is recommended that this authority is obtained before a development application is made.

Some work will be accepted development and will not require a development application and assessment against this code.

Guidance on addressing code requirements is available in the State Development Assessment Provisions Guidance Material: State code 12: Development in a declared fish habitat area, Department of National Parks, Sport and Racing 2017.

## 12.2 Performance outcomes and acceptable outcomes

Development that is building work or operational work in a **declared fish habitat area** should demonstrate compliance with the relevant provisions of table 12.2.2. For further details of the specific performance outcomes to be addressed, please refer to table 12.2.1.

Table 12.2.1: Development type and relevant provisions of the code

Development	Relevant provisions of code
Prescribed development purposes	Table 12.2.2 – PO1
All development	Table 12.2.2 – PO2 – PO21
Researching, including monitoring or educating	Table 12.2.2 – PO22
Constructing a temporary structure	Table 12.2.2 – PO23 – PO24
Structures in a management A area that were constructed before the area was declared as fish habitat area	Table 12.2.2 – PO25 – PO26
Structures in a management B area	Table 12.2.2 – PO27 – PO32
Beach replenishment in a management B area	Table 12.2.2 – PO33 – PO38
Dredging or extracting sediment	Table 12.2.2 – PO39
Aquaculture	Table 12.2.2 – PO40
Matters of state environmental significance	Table 12.2.2 – PO41

Table 12.2.2: Building work or operational works

Performance outcomes	Acceptable outcomes
Prescribed development purposes	
PO1 Development is only undertaken for a	No acceptable outcome is prescribed.
prescribed development purpose in a declared	
fish habitat area, which are:	

#### **Performance outcomes**

#### Acceptable outcomes

- for management A areas and management B areas:
  - a. restoring the **fish habitat** or natural processes
  - b. managing fisheries resources or fish habitat
  - researching, including monitoring or educating
  - d. ensuring public health or safety
  - e. providing public infrastructure to facilitate **fishing**
  - f. providing subterranean public infrastructure if the surface of the area can be restored, after the completion of the works or activity, to its condition, before the performance of the works or activity
  - g. constructing a temporary structure
  - maintaining a structure that was constructed before the area was declared to be a fish habitat area
  - maintaining a structure, other than a structure mentioned in paragraph h that has been lawfully constructed
- 2. for management B areas only:
  - a. constructing a permanent structure on **tidal** land or within the management area; or
  - b. depositing material for beach replenishment in the management area.

Note: **Prescribed development purposes** is defined in section 214 of the Fisheries Regulation 2008. Additional guidance about development in a **declared fish habitat area** is defined provided in the policy provisions of Marine resource management: management of declared fish habitat areas, Department of National Parks, Sport and Racing, 2015.

#### All development

**PO2** When development is proposed for any of the purposes mentioned in PO1, there is a demonstrated need for the development, and for the following types of development, alternative locations outside the **declared fish habitat area** have been assessed and are not viable:

- a. for management A areas and management B areas:
- b. researching, including monitoring or educating
- c. ensuring public health or safety
- d. providing **public infrastructure** to facilitate **fishing**
- e. providing subterranean **public infrastructure** if the surface of the area can be restored, after the completion of the works or activity, to its condition before the performance of the works or activity
- f. constructing a temporary structure
- g. for management B areas only:
- h. constructing a permanent structure on **tidal land** or within the management area; or
- i. depositing material for beach replenishment in the management area.

For development to ensure public health and safety:

#### AO2.1 Development is:

- for a public health purpose and has been formally endorsed as being necessary by Queensland Health or the relevant government authority; or
- for mosquito control and is required to be carried out under a mosquito management plan developed in accordance with the Mosquito management code of practice for Queensland, Local Government Association of Queensland, 2014 and do not include works for the control of other nuisance pest insect species (for example, midges); or
- for an aid to navigation and is endorsed in writing by Department of Transport and Main Roads or Gold Coast Waterways Authority; or
- 4. is for a cyclone buoy mooring and:
  - is identified under the relevant port cyclone contingency plan by the controlling authority (for example, a port authority)

Performance outcomes	Acceptable outcomes
	<ul> <li>b. is located in accordance with any cyclone mooring plan prepared by the controlling authority</li> <li>c. is only used during a cyclone event or other genuine emergency situation.</li> </ul> For any other development, no acceptable outcome
	is prescribed.
<b>PO3</b> Only those aspects of a development that have a physical or functional requirement to be located within the <b>declared fish habitat area</b> occur within the area. Ancillary elements (for example, car and trailer parks, rest rooms, offices) occur outside the <b>declared fish habitat area</b> .	No acceptable outcome is prescribed.
PO4 The spatial extent of development within the	For development involving bridge infrastructure:
<b>declared fish habitat area</b> is minimised to the greatest extent practical.	AO4.1 Bridge abutments are sited outside the declared fish habitat area.
	AND
	AO4.2 Bridges are supported on piles only (not culverts, pipes or causeways) and the number of bridge piles within the declared fish habitat area is minimised.
	AND
	For development involving overhead electricity and communication cables:
	AO4.3 Development uses the maximum cable span length possible.
	AND
	For development involving private structures:
	AO4.4 Development that is for private jetties, pontoons, boat ramps and <b>fishing</b> platforms has a maximum total permanent footprint of 40 square metres.
	AND
	AO4.5 Development that is for private jetties, fishing platforms and pontoons has an access walkway, if required, that is less than 2 metres wide.
	AND
	AO4.6 Development that is for private buoy mooring is an environmentally friendly mooring design.
	For any other development, no acceptable outcome is prescribed.
PO5 Development impacting communities' fisheries resources:	No acceptable outcome is prescribed.

Performance outcomes	Acceptable outcomes
directly abuts land that has full riparian access	
rights, or	
2. is in a location within the <b>declared fish habitat</b>	
area with planning arrangements that support	
the structure e.g. designated or agreed mooring	
areas.	
Note: Further guidance on rights in context of <b>fisheries</b>	
resources and fish habitats is provided in the operational policy	
provisions of Management and protection of marine plants and other tidal fish habitats (FHMOP 001), Department of Primary	
Industries and Fisheries, 2007.	
The provision of owner's consent to lodge the development	
application does not confer rights.	
PO6 Development which is for restoration,	No acceptable outcome is prescribed.
management activities or temporary works (such as research, monitoring or educational activities),	
ensures fisheries resources and fish habitats	
return to pre-existing or improved condition when the	
activity has ceased.	
PO7 Development does not increase the risk of	No acceptable outcome is prescribed.
mortality, <b>disease</b> or injury, or compromise the	
health, productivity, marketability or suitability for	
human consumption of <b>fisheries resources</b> , having	
regard to (but not limited to):  1. biotic and abiotic conditions, such as water and	
sediment quality	
2. substances that are toxic to plants or toxic to or	
cumulative within <b>fish</b>	
3. design of structures	
4. whether <b>fish</b> may be trapped or stranded	
5. <b>fish</b> passage and access to habitat generally; and	
6. the impacts of <b>pest fish</b> and other relevant pest	
species.	
PO8 Development maintains or improves water	For development involving bridge infrastructure:
quality.	
	AO8.1 Bridges are designed to direct water run-off
	outside the declared fish habitat area.
	For any other development, no acceptable outcome
	is nominated.
PO9 Development maintains tidal or stream	For works for mosquito control:
hydrology and retains natural drainage and	
inundation patterns.	AO9.1 Development for runnelling works complies
	with the policy guidelines in Departmental
	procedures for permit applications assessment and approvals for insect pest control in coastal wetlands
	(FHMOP 003), Department of Primary Industries,
	1996 and:
	increases tidal flushing
	2. follows lines of natural water flow
	3. is no deeper than 30 centimetres
	4. has a 3:1 width:depth ratio; and
	5. a spoon shape with gently sloping concave
	sides.
	For any other development, no acceptable outcome
	is nominated.
	,

Performance outcomes	Acceptable outcomes
PO10 Development likely to cause disturbance to	No acceptable outcome is prescribed.
potential or actual acid sulfate soil, prevents the	·
release of contaminants.	
Note: Management of acid sulfate soil is consistent with the	
current Queensland acid sulfate soil technical manual: Soil	
Management Guidelines V4.0, Department of Science,	
Information Technology, Innovation and the Arts, 2014.  PO11 Where benthic disturbance is necessary, it is	No acceptable outcome is prescribed.
	No acceptable outcome is prescribed.
undertaken in a manner that enables the area to be	
restored to the pre-disturbance condition and profile,	
having regard to (amongst other things):	
surface sediment type and profile	
2. bank profile and potential for erosion; and	
amount of surface area disturbed.	
Nets Cook disturbance include but any act the test of	
Note: Such disturbances include but are not limited to those associated with provisions of subterranean infrastructure, or	
temporary structures.	
PO12 Excess sediment arising from development is	AO12.1 Excess sediment is disposed of outside of
managed to avoid further disturbance within the	the boundaries of a declared fish habitat area.
declared fish habitat area.	
PO13 The design and siting of development	No acceptable outcome is prescribed.
maximises light penetration under the structure	γ
where feasible, through measures such as:	
1. increasing the height of the structure above the	
substrate	
2. decreasing the width of the structure	
using a north-south orientation	
4. using pedestrian decking surfaces that maximise	
light penetration to the substrate.	
PO14 Development is designed, sited and	No acceptable outcome is prescribed.
constructed such that the potential for additional	The designation of the property of
works to ensure long term operability is minimised,	
having regard to (amongst other things) the need for	
future:	
dredging to maintain access	
2. trimming of <b>marine plants</b> ; or	
3. warning signs or protective structures.	
PO15 Public boat ramps have vessel staging areas	No acceptable outcome is prescribed.
that are appropriate for the size of the boat ramp.	The acceptance outcome to prescribed.
mat are appropriate for the size of the boat famp.	
Note: Vessel staging areas include land based staging areas and	
staging areas in water.	

PO16 Development minimises disturbance to marine plants.  ACCEPTABLE OUTCOMES  For private structures or works:  AO16.1 Private fishing platforms, private jetties pontoons extend through a marine plant fringe is no more than 15 metres wide (measured perpendicular to the shore).  AND  AO16.2 Private boat ramps have a total area of marine plant disturbance for construction that is than 45 square metres and extends through a mplant fringe that is no more than three metres will (measured perpendicular to the shore).  AND	that less arine
AO16.1 Private fishing platforms, private jetties pontoons extend through a marine plant fringe is no more than 15 metres wide (measured perpendicular to the shore).  AND  AO16.2 Private boat ramps have a total area of marine plant disturbance for construction that is than 45 square metres and extends through a marine plant fringe that is no more than three metres will (measured perpendicular to the shore).	less arine
AO16.1 Private fishing platforms, private jetties pontoons extend through a marine plant fringe is no more than 15 metres wide (measured perpendicular to the shore).  AND  AO16.2 Private boat ramps have a total area of marine plant disturbance for construction that is than 45 square metres and extends through a m plant fringe that is no more than three metres will (measured perpendicular to the shore).	less arine
is no more than 15 metres wide (measured perpendicular to the shore).  AND  AO16.2 Private boat ramps have a total area of marine plant disturbance for construction that is than 45 square metres and extends through a marine plant fringe that is no more than three metres will (measured perpendicular to the shore).	less arine
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AO16.2 Private boat ramps have a total area of marine plant disturbance for construction that is than 45 square metres and extends through a mplant fringe that is no more than three metres with (measured perpendicular to the shore).	less arine
marine plant disturbance for construction that is than 45 square metres and extends through a metrop plant fringe that is no more than three metres with (measured perpendicular to the shore).	less arine
marine plant disturbance for construction that is than 45 square metres and extends through a measured perpendicular to the shore).	less arine
AND	
l — .	
For signs:	
AO16.3 Signs do not involve disturbance of ma plants unless this would compromise the purpo a warning sign.	
For any other development, no acceptable outo is prescribed.	ome
PO17 To the greatest extent practical, development No acceptable outcome is nominated.	
occurs in a way that allows for the <b>fish habitat</b> to	
quickly recover through natural processes.	
Note: A condition of approval for any restoration proposed in a declared fish habitat area is likely to require a post-works monitoring and maintenance program appropriate for the scale of the restoration works.	
PO18 Marine plants to be used for revegetation  No acceptable outcome is prescribed.	
purposes have local provenance and are obtained	
from within a declared fish habitat area only if:	
1. no alternative source of marine plants is	
feasible; or	
the removal of marine plants will have minimal impact on the declared fish habitat area.	
Note: Vegetation to be used in a restoration project should comply with any relevant provisions of the National policy for the translocation of live aquatic organisms. See Management and protection of marine plants and other tidal fish habitats (FHMOP 001), Department of Primary Industries and Fisheries, 2007 for specific guidance on marine plant translocation.	
PO19 Development for a public or educational No acceptable outcome is prescribed.	
purpose is located to optimise <b>public use</b> , benefit or	
awareness of the declared fish habitat area.  PO20 Development does not adversely impact on the declared fish habitat area.	
PO20 Development does not adversely impact on community access to fisheries resources and fish	
habitats including recreational and indigenous	
fishing access.	
Note: In some cases, compensation for impact on <b>fisheries</b> access may be necessary. The Guideline on fisheries adjustment provides advice for proponents on relevant <b>fisheries</b> adjustment processes and is available by request from the Department of Agriculture and Fisheries.	
PO21 Development does not adversely impact on No acceptable outcome is prescribed.	
commercial <b>fishing</b> access and linkages between a	

Devise was a suite a was	Associable suiteemes
Performance outcomes	Acceptable outcomes
commercial <b>fishery</b> and infrastructure, services and facilities.	
Tabilitios.	
Note: In some cases, compensation for impact on fisheries	
access may be necessary. The Guideline on fisheries adjustment provides advice for proponents on relevant <b>fisheries</b> adjustment	
processes and is available by request from the Department of	
Agriculture and Fisheries.	
Research including monitoring or education	No constable systems is a second and
<b>PO22</b> Development that is for researching, including monitoring, surveying and investigating or educating,	No acceptable outcome is prescribed.
is directly related to one or more of the following:	
1. <b>fish</b> , <b>fisheries</b> or <b>fish habitat</b> ; or	
general biological or ecosystem values or	
processes within the area; or	
3. protected area management; or	
4. investigation of impacts of development on the	
declared fish habitat area.	
Note: Researching, including monitoring, surveying and	
investigating or educating should be undertaken by a public	
sector entity; primary, secondary or tertiary education institution,	
research institution, registered surveyor, registered research company or appropriately qualified and experienced consultant.	
Constructing a temporary structure	
PO23 A temporary structure is in place for a limited	AO23.1 The structure is able to be removed in its
period and is designed to be completely removed.	entirety.
	AND and of the following cocentable systems:
	AND one of the following acceptable outcomes
	apply
	AO23.2 A temporary waterway barrier that prevents
	tidal flow is in place for no more than 21 business
	days.
	OD.
	OR
	AO23.3 A temporary structure, that is not a
	waterway barrier that prevents tidal flow, is in place
	for the shortest possible time, but no more than six
	months.
PO24 The temporary structure minimises impacts on	No acceptable outcome is prescribed.
fish migration.	
Structures in a management A area that were cons	structed before the area was declared as a fish
PO25 Relocation or exchange of an existing	No acceptable outcome is prescribed.
structure:	ino acceptable outcome is prescribed.
results in a footprint that is less than or equal to	
the footprint of the existing structure	
2. improves the condition of <b>fisheries resources</b>	
and <b>fish habitats</b> , including through water	
quality outcomes.	ACCOAD Development (first to first
PO26 Upgrading or replacement of public sewerage,	AO26.1 Development that is for an upgrade to
water treatment and stormwater infrastructure minimises the disturbance footprint within the	existing stormwater, sewer or water treatment infrastructure results in an increase in the size of the
declared fish habitat area and improves the	structure by no more than 20 square metres and
condition of fisheries resources and fish habitats,	water is treated to a higher standard than the
including through improved water quality outcomes.	existing situation, before entering the <b>declared fish</b>
	habitat area.
Structures in a management B area	

Performance outcomes	Acceptable outcomes
PO27 For private development that is for the	No acceptable outcome is prescribed.
purposes of facilitating <b>fishing</b> or boat access (e.g.	ino acceptable outcome is prescribed.
installation of a private jetty, pontoon, boat ramp or	
<b>fishing</b> platform) only one structure or facility is	
provided per adjoining property and is located	
entirely within the extension of the side boundaries	
of that property.	
PO28 For private development that is for the	No acceptable outcome is prescribed.
purposes of a private boat mooring (e.g. installation	assignatio databilio lo produitodi
of a private buoy mooring):	
only one mooring is provided per adjoining	
property and is located entirely within the	
extension of the side boundaries of that	
property; or	
2. the mooring is installed within a government	
approved designated mooring area or within a	
location that is supported by the Department of	
Transport and Main Roads.	
PO29 The establishment of structures or	No acceptable outcome is prescribed.
infrastructure does not involve filling of tidal land.	
PO30 Development for erosion control purposes	No acceptable outcome is prescribed.
(including revetments, groynes and gabions) only	
occurs where erosion is resulting in an immediate	
threat to:	
1. the ability to use the <b>land</b> for its existing or	
approved purpose; or	
2. infrastructure, structures or buildings that are not	
expendable or not able to be relocated; or	
3. a cultural heritage site.	
PO31 Development for erosion control purposes	No acceptable outcome is prescribed.
(including revetments, groynes and gabions)	
represents the best available erosion management	
solution from both an erosion management and a	
fish habitat management perspective.	No population automorphism and a superior state of the superior st
PO32 Development for erosion control purposes	No acceptable outcome is prescribed.
(including revetments, groynes and gabions) does	
not result in permanent loss of <b>fish habitat</b> beyond	
the footprint of the structure, other than where caused by minimal regularisation of the <b>foreshore</b>	
boundary required to maintain a consistent	
alignment with adjacent properties as part of a co-	
ordinated erosion control strategy for the location.	
Beach replenishment in a management B area	
PO33 Beach replenishment only occurs where	No acceptable outcome is prescribed.
erosion is resulting in an immediate threat to:	The acceptable datedine is prescribed.
the ability to use the <b>land</b> for its existing or	
approved purpose; or	
2. infrastructure, structures or buildings that are not	
expendable or not able to be relocated; or	
a significant cultural heritage site.	
PO34 The area that the beach replenishment is to	No acceptable outcome is prescribed.
be carried out on is a high-energy, sandy sediment	Seesplanie editerine le prodelibed.
shoreline with biological communities adapted to	
mobile sediments.	
PO35 Beach replenishment does not create	No acceptable outcome is prescribed.
terrestrial <b>land</b> , unless a sacrificial dune or beach	The acceptable datestile to produitsou.
which forms an integral part of the erosion control	
design.	

Performance outcomes	Acceptable outcomes
PO36 The beach replenishment work is undertaken	No acceptable outcome is prescribed.
in a way that minimises the need for other erosion	·
control activities or works.	
PO37 The beach replenishment work is undertaken	AO37.1 Beach replenishment will not require
in a way that minimises the frequency of any	maintenance more often than every two years.
ongoing replenishment requirements.	
PO38 A source of replenishment material for future	AO38.1 Beach replenishment material is sourced
maintenance is identified and secured.	from:
	a distance of greater than 100 metres from a
	declared fish habitat area; or
	2. from works within a declared fish habitat area
	that have been authorised for another purpose;
	or
	3. from a navigational channel.
Dredging or extracting sediment	
PO39 Dredging or extracting sediment is only	No acceptable outcome is prescribed.
undertaken for the purposes of:	
1. restoring <b>fish habitats</b> or natural processes; or	
2. as part of the construction of a structure (e.g.	
excavating the footings for a boat ramp or	
revetment wall).	
Aquaculture	
PO40 Development for aquaculture is only for tidal	No acceptable outcome is prescribed.
works associated with oyster production within	
licensed oyster areas in compliance with the Oyster	
industry plan for Moreton Bay Marine Park,	
Department of Agriculture and Fisheries, 2015.	
Note: Water intake and discharge structures associated with land	
based aquaculture developments (e.g. prawn farms) are	
considered as structures within a declared fish habitat area	
rather than aquaculture.	
Matters of state environmental significance	
	No constable systems is managined
PO41 Development:	No acceptable outcome is prescribed.
PO41 Development: 1. avoids impacts on matters of state	No acceptable outcome is prescribed.
PO41 Development: 1. avoids impacts on matters of state environmental significance; or	No acceptable outcome is prescribed.
PO41 Development: 1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of	No acceptable outcome is prescribed.
PO41 Development: 1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after	No acceptable outcome is prescribed.
PO41 Development: 1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably	No acceptable outcome is prescribed.
PO41 Development: 1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and	No acceptable outcome is prescribed.
PO41 Development: 1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all	No acceptable outcome is prescribed.
PO41 Development: 1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and	No acceptable outcome is prescribed.
1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the	No acceptable outcome is prescribed.
1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable	No acceptable outcome is prescribed.
PO41 Development:  1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of	No acceptable outcome is prescribed.
1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable	No acceptable outcome is prescribed.
1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of	No acceptable outcome is prescribed.
1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of state environmental significance.  Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1	No acceptable outcome is prescribed.
1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of state environmental significance.  Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1 Conservation/Buffer, E2 Open Space or Buffer/Investigation in the	No acceptable outcome is prescribed.
1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of state environmental significance.  Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1	No acceptable outcome is prescribed.
PO41 Development:  1. avoids impacts on matters of state     environmental significance; or  2. minimises and mitigates impacts on matters of     state environmental significance after     demonstrating avoidance is not reasonably     possible; and  3. provides an offset if, after demonstrating all     reasonable avoidance, minimisation and     mitigation measures are undertaken, the     development results in an acceptable     significant residual impact on a matter of     state environmental significance.  Statutory note: For Brisbane core port land, an offset may only be     applied to development on land identified as E1     Conservation/Buffer, E2 Open Space or Buffer/Investigation in the     Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see     www.portbris.com.au.	No acceptable outcome is prescribed.
PO41 Development:  1. avoids impacts on matters of state     environmental significance; or  2. minimises and mitigates impacts on matters of     state environmental significance after     demonstrating avoidance is not reasonably     possible; and  3. provides an offset if, after demonstrating all     reasonable avoidance, minimisation and     mitigation measures are undertaken, the     development results in an acceptable     significant residual impact on a matter of     state environmental significance.  Statutory note: For Brisbane core port land, an offset may only be     applied to development on land identified as E1     Conservation/Buffer, E2 Open Space or Buffer/Investigation in the     Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see     www.portbris.com.au.  Note: For the purpose of this code, the matters of state	No acceptable outcome is prescribed.
PO41 Development:  1. avoids impacts on matters of state environmental significance; or 2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and 3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of state environmental significance.  Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1 Conservation/Buffer, E2 Open Space or Buffer/Investigation in the Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see www.portbris.com.au.  Note: For the purpose of this code, the matters of state environmental significance assessed are marine plants,	No acceptable outcome is prescribed.
<ol> <li>PO41 Development:         <ol> <li>avoids impacts on matters of state environmental significance; or</li> <li>minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and</li> <li>provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of state environmental significance.</li> </ol> </li> <li>Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1 Conservation/Buffer, E2 Open Space or Buffer/Investigation in the Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see www.portbris.com.au.</li> <li>Note: For the purpose of this code, the matters of state</li> </ol>	No acceptable outcome is prescribed.
PO41 Development:  1. avoids impacts on matters of state     environmental significance; or  2. minimises and mitigates impacts on matters of     state environmental significance after     demonstrating avoidance is not reasonably     possible; and  3. provides an offset if, after demonstrating all     reasonable avoidance, minimisation and     mitigation measures are undertaken, the     development results in an acceptable     significant residual impact on a matter of     state environmental significance.  Statutory note: For Brisbane core port land, an offset may only be     applied to development on land identified as E1     Conservation/Buffer, E2 Open Space or Buffer/Investigation in the     Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see     www.portbris.com.au.  Note: For the purpose of this code, the matters of state     environmental significance assessed are marine plants,     waterways that provide for fish passage and declared fish     habitat areas.	No acceptable outcome is prescribed.
PO41 Development:  1. avoids impacts on matters of state     environmental significance; or  2. minimises and mitigates impacts on matters of     state environmental significance after     demonstrating avoidance is not reasonably     possible; and  3. provides an offset if, after demonstrating all     reasonable avoidance, minimisation and     mitigation measures are undertaken, the     development results in an acceptable     significant residual impact on a matter of     state environmental significance.  Statutory note: For Brisbane core port land, an offset may only be     applied to development on land identified as E1     Conservation/Buffer, E2 Open Space or Buffer/Investigation in the     Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see     www.portbris.com.au.  Note: For the purpose of this code, the matters of state     environmental significance assessed are marine plants,     waterways that provide for fish passage and declared fish     habitat areas.  Guidance for determining if the development will have a	No acceptable outcome is prescribed.
<ol> <li>PO41 Development:         <ol> <li>avoids impacts on matters of state environmental significance; or</li> <li>minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and</li> <li>provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of state environmental significance.</li> </ol> </li> <li>Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1 Conservation/Buffer, E2 Open Space or Buffer/Investigation in the Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see www.portbris.com.au.</li> <li>Note: For the purpose of this code, the matters of state environmental significance assessed are marine plants, waterways that provide for fish passage and declared fish habitat areas.</li> </ol>	No acceptable outcome is prescribed.

Performance outcomes	Acceptable outcomes
Infrastructure and Planning, 2014. Where the significant	
residual impact is considered an acceptable impact on the	
matter of state environmental significance and an offset is	
considered appropriate under the Environmental offsets	
framework, the <b>offset</b> should be delivered in accordance with the	
Environmental Offsets Act 2014.	

### 12.3 Reference documents

Department of Agriculture, Fisheries and Forestry 2013, Guideline on Fisheries Adjustment as a Result of Development

Department of Environment and Heritage Protection 2016, Queensland environmental offsets framework documents

Department of National Parks, Sport and Racing 2017, State Development Assessment Provisions Guidance Material: State code 12: Development in a declared fish habitat area

Department of National Parks, Sport and Racing 2005, Fish habitat area code of practice: The lawful use of physical, pesticide and biological controls in a declared fish habitat area.

Department of Primary Industries 1998, Restoration of fish habitats: Fisheries guidelines for marine areas FHG 002

Department of Primary Industries 2000, Fisheries guidelines for fish habitat buffer zones FHG 003

Department of Primary Industries and Fisheries 2006, Fisheries guidelines for fish-friendly structures FHG 006

Department of State Development, Infrastructure and Planning 2014, Significant Residual Impact Guideline

Local Government Association of Queensland 2012, Mosquito management code of practice

#### **Policies**

Department of National Parks, Sport and Racing 2013, Marine resource management: Fish habitat Area selection, assessment, declaration and review

Department of National Parks, Sport and Racing 2015, Marine resource management: Management of declared fish habitat areas

Department of Primary Industries 1998, Departmental procedures for provision of fisheries comments: Dredging, Extraction and Spoil Disposal Activities (FHMOP 004)

Department of Primary Industries and Fisheries 2007, Management and protection of marine plants and other tidal fish habitats (FHMOP001)

Department of Primary Industries and Fisheries 2007, Tidal fish habitats, erosion control and beach replenishment (FHMOP010)

Department of Agriculture and Fisheries 2015, Oyster industry Management Plan for Moreton Bay Marine Park

Ministerial Council on Forestry, Fisheries and Aquaculture 1999, National Policy for the Translocation of Live Aquatic Organisms – Issues, Principles and Guidelines for Implementation

Queensland Department of Primary Industries 1996, Departmental Procedures for Permit Applications Assessment and Approvals for Insect Pest Control in Coastal Wetlands (FHMOP 003)

#### **Accepted development**

Department of National Parks, Sport and Racing 2017, Accepted development requirements for operational work that is completely or partly within a declared fish habitat area

#### Other references

Department of Agriculture and Fisheries website, What is a waterway?

Department of Agriculture and Fisheries website, What is a waterway barrier work?

Department of Agriculture and Fisheries website, What is not a waterway barrier work?

Department of Agriculture, Fisheries and Forestry 2013, Guideline on fisheries adjustment as a result of development

Department of Employment, Economic Development and Innovation 2010, Declared fish habitat area network strategy 2009-14: Planning for the future of Queensland's declared fish habitat area network

Department of Environment and Resource Management 2011, Queensland Wetland Buffer Planning Guideline

Department of Agriculture, Fisheries and Forestry 2013, Declared Fish Habitat Area Network Assessment Report 2012

Department of National Parks, Recreation, Sport and Racing website, Declared fish habitat area plans

Department of Natural Resources and Mines 2002, Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines

Department of Science, Information Technology, Innovation and the Arts 2014, Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines v4.0

International Ecohydraulics Symposium 2012, From Sea to Source: International guidance for the restoration of fish migration highways

International Erosion Control Association Australasia 2008, Best practice erosion and sediment control document

SEQ Catchments website

## 12.4 Glossary of terms

Aquaculture see the Fisheries Act 1994.

Note: Aquaculture means the cultivation of live fisheries resources for sale other than in circumstances prescribed under a regulation.

#### Declared fish habitat area see the Fisheries Act 1994.

Note: **Declared fish habitat area** means an area that is declared under the *Fisheries Act 1994* to be a **fish habitat** area. Section 120 of the *Fisheries Act 1994* deals with declaration of **fish habitat** areas.

**Designated mooring area** see Marine resource management: Management of declared fish habitat areas, Department of National Parks, Sport and Racing, 2015.

Note: **Designated mooring area** means an area designated for moorings under an agreement, plan or legislation by the Department of Agriculture and Fisheries, Department of Transport and Main Roads and/or any other relevant agencies.

Disease see section 94 of the Fisheries Act 1994.

Note: **Disease** means:

- a disease, parasite, pest, plant or other thing (the disease) that has, or may have, the effect (directly or indirectly) of killing or causing illness in fisheries resources, or in humans or animals that eat fisheries resources infected with or containing the disease
- a chemical or antibiotic residue
- a fish or plant species that may compete against fisheries resources or other fisheries resources to the detriment of the fisheries resources or other fisheries resources.

#### Entity see the schedule of the Fisheries Act 1994.

Note: Entity includes an entity established under the law of the Commonwealth or another state.

#### Fish see section 5 of the Fisheries Act 1994.

Note: Fish:

- 1. means an animal (whether living or dead) of a species that throughout its life cycle usually lives:
  - a. in water (whether freshwater or saltwater); or
  - b. in or on **foreshores**; or
  - c. in or on land under water
- includes:
  - a. prawns, crayfish, rock lobsters, crabs and other crustaceans
  - b. scallops, oysters, pearl oysters and other molluscs
  - c. sponges, annelid worms, bêche-de-mer and other holothurians
  - d. trochus and green snails
  - e. does not include:
  - f. crocodiles, or
  - g. protected animals under the Nature Conservation Act 1992; or
  - h. pests under the Pest Management Act 2001; or
  - i. animals prescribed under a regulation not to be fish
- also includes:
  - a. the spat, spawn and eggs of fish
  - b. any part of fish or spat, spawn or eggs of fish
  - c. treated fish, including treated spat, spawn and eggs of fish
  - d. coral, coral limestone, shell grit or star sand
  - e. freshwater or saltwater products declared under a regulation to be fish.

#### Fish habitat see the Fisheries Act 1994.

Note: Fish habitat includes land, waters and plants associated with the life cycle of fish, and includes land and waters not presently occupied by fisheries resources.

#### Fisheries resources see the Fisheries Act 1994.

Note: Fisheries resources includes fish and marine plants.

#### Fishery see section 7 of the Fisheries Act 1994.

Note: Fishery means activity by way of fishing, for example, activities specified by reference to all or any of the following:

- a species of fish
- 2. a type of fish by reference to sex, size or age or another characteristic
- 3. an area
- 4. a way of fishing
- 5. a type of boat
- 6. a class of person
- 7. the purpose of an activity
- 8. the effect of the activity on a fish habitat, whether or not the activity involves fishing
- 9. anything else prescribed under a regulation.

#### Fishing see the Fisheries Act 1994.

Note: Fishing includes:

- 1. searching for, or taking, fish
- 2. attempting to search for, or take, fish
- 3. engaging in other activities that can reasonably be expected to result in the locating, or taking, of fish
- 4. landing **fish** (from a boat or in another way), bringing **fish** ashore or transhipping **fish**.

#### Foreshore see the Fisheries Act 1994.

Note: Foreshore means parts of the banks, beds, reefs, shoals, shore and other land between high water and low water.

#### Land includes foreshores and tidal and non-tidal land.

#### Legally secured offset area see the Environmental Offsets Act 2014.

Note: An area of land is a legally secured offset area if:

- 1. the area is:
  - a. an environmental offset protection area; or
  - an area declared as an area of high nature conservation value under section 19F of the Vegetation Management Act 1999; or
     another area prescribed under a regulation; and
- under the Environmental Offsets Act 2014 or another Act, the area is subject to a delivery or management plan or agreement (however described in this Act or the other Act) to achieve a conservation outcome for a prescribed environmental matter.

#### Management A area see the Fisheries Regulation 2008.

Note: A management A area means an area within a declared fish habitat area identified by the words 'management A' on the fish habitat area plan mentioned in schedule 3 for the declared fish habitat area.

#### Management B area see the Fisheries Regulation 2008.

Note: A management B area means an area within a declared fish habitat area identified by the words 'management B' on the fish habitat area plan mentioned in schedule 3 for the declared fish habitat area.

**Marina** see Marine Resource Management: Management of Declared Fish Habitat Areas Operational Policy, Department of National Parks, Sport and Racing, 2015.

Note: **Marina** means an area of tidal water primarily used for storage of multiple vessels secured to fixed or floating platforms that can be used to access the vessels. The **marina** may also include uses such as slipways, boat ramps, and fuel wharves.

#### Marine plant see section 8 of the Fisheries Act 1994.

Note: Marine plant includes the following:

- 1. a plant (a tidal plant) that usually grows on, or adjacent to, tidal land, whether it is living, dead, standing or fallen
- 2. material of a tidal plant, or other plant material on tidal land
- 3. a plant, or material of a plant, prescribed under a regulation or management plan to be a marine plant.

A marine plant does not include a plant that is a declared pest under the Land Protection (Pest and Stock Route Management) Act 2002.

#### Matters of state environmental significance see the Environmental Offsets Regulation 2014.

Note: **Matters of state environmental significance** are **prescribed environmental matters** under the Environmental Offsets Regulation 2014 that require an **offset** when a prescribed activity will have a **significant residual impact** on the matter. A **matter of state environmental significance** is any of the following matters:

- 1. regional ecosystems under the Vegetation Management Act 1999 that:
  - a. are endangered regional ecosystems
  - b. are of concern regional ecosystems
  - c. intersect with a wetland shown on the vegetation management wetlands map
  - d. contain areas of essential habitat shown on the essential habitat map for an animal that is endangered wildlife or vulnerable wildlife or a plant that is endangered wildlife or vulnerable wildlife
  - e. are located within the defined distances stated in the Environmental Offsets Policy 2014 from the defining banks of a relevant watercourse or drainage feature as shown on the vegetation management watercourse and drainage feature map; or
  - f. are areas of **land** determined to be required for ecosystem functioning ('connectivity areas')
- wetlands in a wetland protection area or wetlands of high ecological significance shown on the map of referable wetlands under the Environmental Protection Regulation 2008
- wetlands and watercourses in high ecological value waters as defined in schedule 2 of the Environmental Protection (Water) Policy 2009
- 4. designated precincts in strategic environmental areas under the Regional Planning Interests Regulation 2014
- threatened wildlife under the Nature Conservation Act 1992 and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006
- 6. protected areas under the Nature Conservation Act 1992, excluding coordinated conservation areas
- 7. highly protected zones of state marine parks under the Marine Parks Act 2004
- 8. declared fish habitat areas under the Fisheries Act 1994
- 9. **waterways** that provide for **fish** passage under the *Fisheries Act 1994* if the construction, installation or modification of **waterway** barrier works carried will limit the passage of **fish** along the **waterway**
- 10. marine plants under the Fisherie's Act 1994; or
- 11. legally secured offset areas.

#### Offset means environmental offset under the Environmental Offsets Act 2014.

Note: Environmental **offset** means an activity undertaken to counterbalance a **significant residual impact** of a prescribed activity on a **prescribed environmental matter**, delivered in accordance with the Environmental offsets framework, Department of Environment and Heritage Protection, 2016. The **prescribed environmental matters** assessed under the State Development Assessment Provisions are **matters of state environmental significance**.

#### Prescribed development purposes see the Fisheries Regulation 2008.

Note: A prescribed development purpose for a declared fish habitat area, means any of the following in, or directly affecting, the area:

- restoring the fish habitat or natural processes (for example: reinstating tidal profiles for allowing restoration of marine plant communities, restoring tidal flows and inundation patterns)
- managing fisheries resources or fish habitat (for example: constructing a boardwalk for public access within a declared fish habitat area for preventing uncontrolled disturbance of the habitat)
- 3. researching, including monitoring, or educating
- 4. ensuring public health or safety
- 5. providing public infrastructure to facilitate **fishing** (for example: a boat ramp or jetty for **public use**)
- 6. providing subterranean public infrastructure if the chief executive is satisfied the surface of the area can be restored, after the completion of the relevant works or activity, to its condition before the performance of the works or activity
- 7. constructing a temporary structure
- 8. maintaining a structure that was constructed before the area was declared to be a fish habitat area under the Act
- 9. maintaining a structure, other than a structure mentioned in 8 above, that has been lawfully constructed
- 10. for a part of the area that is a management B area:
  - a. constructing a permanent structure on tidal land or within the area; or
  - b. depositing material for beach replenishment in the area.

#### **Prescribed environmental matters** see the *Environmental Offsets Act* 2014.

Note: A **prescribed environmental matter** is any species, ecosystem or other similar matter protected under Queensland legislation for which an **offset** may be provided. A **prescribed environmental matter** may be a matter of national, state or local environmental significance, however, assessment criteria in the SDAP only relate to **matters of state environmental significance**. Each of the **prescribed environmental matters** are listed under the Environmental Offsets Regulation 2014.

#### Public sector entity see the Planning Act 2016.

Note: A public sector entity means:

- 1. a department or part of a department; or
- 2. other than in chapter 4 (of the Planning Act 2016) a distributor-retailer; or
- an agency, authority, commission, committee, corporation (including a government owned corporation), instrumentality, office, or other entity, established under an Act for a public or state purpose (for example: a local government, a government owned corporation or a rail government entity under the *Transport Infrastructure Act 1994*).

Public use means available for free use by any member of the public without prior permission.

Resource allocation authority means a resource allocation authority issued, and in force, under part 5, division 3, subdivision 2A of the *Fisheries Act 1994*.

#### Significant residual impact see the Environmental Offsets Act 2014.

Note: Significant residual impact is an impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that:

- 1. remains, or will or is likely to remain, (whether temporarily or permanently) despite on-site mitigation measures for the prescribed activity
- 2. is, or will, or is likely to be, significant.

Guidance for determining if a prescribed activity will have a **significant residual impact** on a **matter of state environmental significance** is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014

#### Tidal land see the Fisheries Act 1994.

Note: Tidal land includes reefs, shoals and other land permanently or periodically submerged by waters subject to tidal influence.

**Translocation** means the movement of live aquatic organisms (including all stages of the organism's life cycle and any derived viable genetic material):

- 1. beyond its accepted distribution; or
- 2. to areas which contain genetically distinct populations; or
- 3. to areas with superior parasite or disease status.

#### Waterway see the Fisheries Act 1994.

Note: **Waterway** includes a river, creek, stream, watercourse or inlet of the sea. For further guidance see the Maintaining Fish Passage in Queensland: What is a waterway? factsheet, Department of Agriculture, Fisheries and Forestry, 2014.

## State code 13: Unexploded ordnance

## 13.1 Purpose statement

The purpose of the code is to ensure that sites identified as having **substantial unexploded ordnance (UXO)** potential are appropriately investigated and, where necessary, remediated so as to not place another part of the environment, or human health, at risk as a consequence of development.

Note: Guidance on how to demonstrate compliance with the performance outcomes of this state code is available in the Planning guidance – State code 13: Unexploded ordnance, Department of Infrastructure, Local Government and Planning, 2017.

## 13.2 Performance outcomes and acceptable outcomes

Development that is a material change of use or reconfiguring a lot on a site identified as **substantial UXO** potential should demonstrate compliance with table 13.2.1.

Table 13.2.1: Material change of use and reconfiguring a lot

Performance outcomes	Acceptable outcomes
<b>PO1</b> A contractor approved by the Commonwealth Department of Defence has certified that the area identified as having <b>UXO</b> potential has been remediated or can be managed to be suitable for the proposed use.	No acceptable outcome is prescribed.
Note: A UXO search can be conducted through the Australian Department of Defence located at <a href="https://www.defence.gov.au/uxo">www.defence.gov.au/uxo</a> . The Australian Department of Defence maintains a list of approved UXO consultants (D2) and contractors (F2) on the Defence Environment and Heritage Panel. Further details are located at: <a href="https://www.defence.gov.au/estatemanagement/support/DEHP/WhoToEngage.asp">www.defence.gov.au/estatemanagement/support/DEHP/WhoToEngage.asp</a> .	

### 13.3 Reference documents

Australian Government, Department of Defence, Unexploded Ordnance in Australia

Note: The Australian Department of Defence will provide advice on the hazards associated with **UXO** to all Commonwealth, state and local government authorities and private organisations or individuals who request it. Defence is actively engaged in identifying areas where **UXO** are likely to be present. Members of the public can assist in this process. If you have any information that may be of assistance please contact UXO@defence.gov.au.

Department of Infrastructure, Local Government and Planning 2017, Planning guidance – State code 13: Unexploded ordnance

## 13.4 Glossary of terms

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA mapping system** is available on the department's website.

**Substantial unexploded ordnance** (**UXO**) means a site identified as having substantial UXO potential on the **DA mapping system**.

## 13.5 Abbreviations

**UXO** – Unexploded ordnance

## State code 14: Queensland heritage

## 14.1 Purpose statement

The purpose of this code is to regulate development on and adjoining a state heritage place to:

- 1. conserve cultural heritage significance for the benefit of the community and future generations
- 2. minimise or mitigate unavoidable impacts on cultural heritage significance
- 3. maintain or enhance the **setting** and streetscape **adjoining** the **state heritage place**, and views to and from the **state heritage place**, where these aspects form part of its **cultural heritage significance**.

In addition, if it is demonstrated that there is no prudent or feasible alternative to **development** on a **state heritage place destroying or substantially reducing** the place's **cultural heritage significance**, ensure that the place's significance is interpreted and incorporated as appropriate.

#### Note:

- 1. The **cultural heritage significance** of a **state heritage place** is described in the entry for the place in the **Queensland Heritage Register** available at www.qld.gov.au/environment/land/heritage/
- 2. Exemption certificates are available for development that has no more than a minimal detrimental impact on cultural heritage significance, and involve a separate assessment process which is administered by the Department of Environment and Science. A general exemption certificate is also available for upfront approval of development that has no impact on cultural heritage significance. For information on exemption certificates or general exemption certificates, refer to www.qld.gov.au/environment/land/heritage/development/approvals/
- Guidance for achieving the performance outcomes and acceptable outcomes for this state code is available in the Guideline SDAP State code 14: Queensland heritage, Department of Environment and Heritage Protection, 2017 available at www.ehp.qld.gov.au/management/planning-guidelines/legislation/developing-application-process/.

## 14.2 Performance outcomes and acceptable outcomes

**Development** on a **state heritage place** should demonstrate compliance with the relevant provisions of table 14.2.2. For further details of the specific performance outcomes to be addressed, please refer to table 14.2.1. A material change of use on land **adjoining** a **state heritage place** should demonstrate compliance with table 14.2.3.

Table 14.2.1: Applicable criteria for development on a state heritage place

Type of development on a state heritage place	Relevant provisions of code
All development on a state heritage place, other	Table 14.2.2 – PO1 – PO3
than development proposing to destroy or	
substantially reduce the cultural heritage	
significance of a state heritage place	
Development proposing to destroy or	Table 14.2.2 – PO4
substantially reduce the cultural heritage	
significance of a state heritage place	

Table 14.2.2: Development on a state heritage place

Performance outcomes	Acceptable outcomes
PO1 Development of a state heritage place:  1. does not have a detrimental impact on the cultural heritage significance of the state heritage place; or  2. where it is demonstrated that 1 is not reasonably achievable:  a. minimises and mitigates unavoidable detrimental impacts on its cultural heritage significance	No acceptable outcome is prescribed.

Performance outcomes	Acceptable outcomes
b. provides opportunities for public	
appreciation of its cultural heritage	
significance	
c. where adaptive reuse is proposed, is	
compatible with its ongoing conservation	
management.	
PO2 Where open space, or the relationship between	No acceptable outcome is prescribed.
built and open spaces at a state heritage place is	·
identified as forming part of its cultural heritage	
significance, development:	
1. maintains or enhances the significance of the	
setting, including significant views, circulation,	
access, spatial patterns and layout	
2. maintains a lot size and layout which permits	
viable adaptive reuse or <b>conservation</b> of	
significant heritage buildings and open spaces.	
PO3 Development on a state heritage place with	No acceptable outcome is prescribed.
identified archaeological potential avoids or	· ·
appropriately manages detrimental impacts on	
artefacts.	
Development proposing to destroy or substantial	y reduce the cultural heritage significance of a
state heritage place	
PO4 Development destroying or substantially	No acceptable outcome is prescribed.
reducing the cultural heritage significance of a	
state heritage place must:	
<ol> <li>demonstrate that there is no prudent and</li> </ol>	
feasible alternative to carrying out the	
development due to:	
<ul> <li>a. an extraordinary economic cost to the state,</li> </ul>	
all or part of a community, or an individual;	
or	
<ul> <li>b. an extraordinary environmental or social</li> </ul>	
disadvantage; or	
<ul> <li>c. a risk to public health or safety; or</li> </ul>	
d. another extraordinary or unique	
circumstance	
2. interpret and incorporate the place's history and	
significance into any <b>development</b> of the site.	
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Statutory note: In accordance with the <i>Planning Act 2016</i> , the State Assessment and Referral Agency (SARA) will seek advice	
from the Queensland Heritage Council (via the Department of	
Environment and Science) on any application that will potentially	
destroy or substantially reduce the cultural heritage	
significance of a state heritage place.	

Table 14.2.3: Material change of use on land adjoining a state heritage place

Performance outcomes	Acceptable outcomes
PO5 Development on land adjoining a state	No acceptable outcome is prescribed.
heritage place:	
<ol> <li>is located, designed and scaled so that its form, bulk and proximity does not have a detrimental impact on the cultural heritage significance of the state heritage place; or</li> <li>where it is demonstrated that 1 is not reasonably achievable, the development minimises and mitigates unavoidable detrimental impacts on cultural heritage significance.</li> </ol>	

### 14.3 Reference documents

Australia ICOMOS 2013, The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance

Department of Environment and Heritage Protection 2017, Guideline – SDAP State code 14: Queensland heritage

### 14.4 Glossary of terms

**Adjoining** means premises that share a common boundary with a **state heritage place**, including premises that meet at a single point on a common boundary.

#### Artefact see the Queensland Heritage Act 1992.

Note: Artefact means an archaeological artefact or underwater cultural heritage artefact. The terms archaeological artefact and underwater cultural heritage artefact are defined in the Queensland Heritage Act 1992.

**Conservation** see The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013

Note: Conservation means all the processes of looking after a place so as to retain its cultural heritage significance.

Cultural heritage significance of a state heritage place is described in the entry for the place in the Queensland Heritage Register available at www.qld.gov.au/environment/land/heritage/.

Note: In describing the **cultural heritage significance** of a **state heritage place**, the entry for the place in the **Queensland Heritage Register** may address the aesthetic, architectural, historical, scientific, social, or other significance of a place or a feature of a place to the present generation or past or future generations. **Cultural heritage significance** is embodied in the place itself: its fabric, **setting**, use, associations, meanings, records, related places and related objects, as described in the entry for the place in the **Queensland Heritage Register**. This definition is based on the *Queensland Heritage Act 1992* and The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013.

#### **Destroy or substantially reduce** see section 277 of the *Planning Act* 2016.

Note: **Destroy or substantially reduce** means to **destroy or substantially reduce** the cultural heritage significance of the **state heritage place**, including:

- by demolishing all elements or features of the place that contribute to the place's cultural heritage significance described in the place's entry in the Queensland Heritage Register; and
- by changing the place so that the place no longer satisfies any of the criteria for entry in the Queensland Heritage Register.

**Development** means development as defined by the *Planning Act 2016*, as well as all types of work and/or changes to built, archaeological, natural and landscape features on the site of a **state heritage place**. This includes, but is not limited to:

- 1. altering, repairing, maintaining or moving a built, natural, or landscape feature
- excavating, filling or other disturbances to land that may damage, expose or move archaeological artefacts
- 3. altering, repairing or removing **artefacts** that contribute to the place's **cultural heritage significance**, including, for example, furniture or fittings; and
- 4. altering, repairing or removing building finishes that contribute to the place's **cultural heritage significance**, including, for example, paint, wallpaper or plaster.

**Identified archaeological potential** means that a place has been entered in the **Queensland Heritage Register** as it has potential to contain an archaeological **artefact** or other feature that is an important source of information about an aspect of Queensland's history. Places with identified archaeological potential satisfy criterion C of the cultural heritage criteria on which places are assessed for entry on the **Queensland Heritage Register**.

**Queensland Heritage Register** means the list of places that have state-level **cultural heritage significance** available at www.qld.gov.au/environment/land/heritage/.

Note: Places in the **Queensland Heritage Register** have been assessed as satisfying one or more of eight cultural heritage criteria and have been entered in accordance with the requirements of the *Queensland Heritage Act 1992*. All applicants are encouraged to obtain a certified copy of the entry for the relevant **state heritage place(s)** from the **Queensland Heritage Register** prior to making a **development** application. A certified copy of entry is an official and complete copy of a place's entry in the **Queensland Heritage Register**. To request a certified copy of entry submit an Application form: Request for a certified copy of entry available at <a href="https://www.qld.gov.au/environment/land/heritage/publications/">www.qld.gov.au/environment/land/heritage/publications/</a> to the Department of Environment and Science along with the required fee.

Setting see The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013.

Note: **Setting** means the immediate and extended environment of a **state heritage place** that is part of or contributes to its **cultural heritage significance** and distinctive character. Urban form, setbacks, landmarks, spatial character and layout, landscape elements and historically significant views to or from the heritage place can contribute to the **cultural heritage significance** of a **setting**.

#### State heritage place see the Queensland Heritage Act 1992.

Note: State heritage place means a place entered in the Queensland Heritage Register as a state heritage place under part 4 of the Queensland Heritage Act 1992.

# State code 15: Removal of quarry material from a watercourse or lake

### 15.1 Purpose statement

The purpose of the code is to provide for the removal of **quarry material** from a **watercourse** or **lake** in a way that ensures the sustainable management of water resources and **quarry material** and does not result in adverse impacts on:

- natural ecosystem processes
- 2. riverine or estuarine environment
- 3. the physical integrity of watercourses and lakes
- 4. infrastructure
- 5. other users' access to quarry material and water resources.

Note: Guidance on addressing code requirements is available in the State Development Assessment Provisions Guidance Material: State code 15: Removal of quarry material, Department of Natural Resources and Mines, 2017.

## 15.2 Performance outcomes and acceptable outcomes

Development for removing **quarry material** should demonstrate compliance with the relevant provisions in table 15.2.1.

Table 15.2.1: Various aspects of development

Performance outcomes	Acceptable outcomes
PO1 Development does not adversely impact on the	No acceptable outcome is prescribed.
natural riverine ecosystem.	
PO2 Development does not adversely impact on	No acceptable outcome is prescribed.
other users' ability to access the resource.	
PO3 Development does not adversely impact on the	No acceptable outcome is prescribed.
physical integrity of the watercourse or lake.	
PO4 Development does not adversely impact on	No acceptable outcome is prescribed.
downstream features, including but not limited to	
estuaries and beaches, that naturally require riverine	
quarry material from the watercourse or lake to	
maintain natural geomorphic processes.	
<b>PO5</b> Development is carried out in a way that would	No acceptable outcome is prescribed.
not adversely impact the structure or operation of	
built infrastructure such as road crossings, bridges,	
weirs and pump sites.	

#### 15.3 Reference documents

Department of Natural Resources and Mines 2017, State Development Assessment Provisions Guidance Material: State code 15: Removal of quarry material

### 15.4 Glossary of terms

Lake see schedule 4 of the Water Act 2000.

Note: Lake includes:

- 1. if a feature is identified on the watercourse identification map as a lake means the feature identified on the map; or
- 2. otherwise, includes:
  - a. a lagoon, swamp or other natural collection of water, whether permanent or intermittent
  - b. the bed and banks and any other element confining or containing the water.

#### Quarry material see schedule 4 of the Water Act 2000.

Note: Quarry material means material, other than a mineral within the meaning of any Act relating to mining, in a watercourse or lake. Quarry material includes stone, gravel, sand, rock, clay, earth and soil unless it is removed from the watercourse or lake as waste material.

#### Watercourse see schedule 4 of the Water Act 2000.

#### Note: A watercourse:

- 1. is a river, creek or other stream, including a stream in the form of an anabranch or a tributary, in which water flows permanently or intermittently, regardless of the frequency of flow events:
  - a. in a natural channel, whether artificially modified or not; or
  - b. in an artificial channel that has changed the course of the stream
  - includes any of the following located in it:
    - a. in-stream islands
    - b. benches
    - c. bars
- does not, however, include a drainage feature
- 4. further:
  - a. unless there is a contrary intention, a reference to a **watercourse** in the *Water Act 2000*, other than in section 5 or in the definitions in schedule 4 to the extent they support the operation of section 5, is a reference to anywhere that is:
    - I. upstream of the downstream limit of the watercourse
    - II. between the lateral limits of the watercourse
  - b. a reference in the *Water Act 2000* to, or to a circumstance that involves, land adjoining a **watercourse**, is a reference to, or to a circumstance that involves, land effectively adjoining a **watercourse**.

Section 5AA of the *Water Act 2000* provides for the **watercourse** identification map that identifies the known extent of **watercourses** and drainage features that are managed under the *Water Act 2000*, and is available at the following link: <a href="https://www.business.qld.gov.au/industry/water/managing-accessing/accessing-water/authorisations/watercourse-map">water/authorisations/watercourse-map</a>. Please be aware that the majority of minor **watercourses** and drainage features in Queensland have not yet been mapped, as indicated in the mapping, and therefore it should not be the only source of information that is relied upon when interpreting the SDAP provisions or identifying assessment triggers.

### State code 16: Native vegetation clearing

### 16.1 Purpose statement

The purpose of this code is to ensure development:

- is consistent with any notice requiring compliance on the land subject to the development application unless a better environmental outcome can be achieved
- is consistent with vegetation management requirements for particular regulated areas unless a better environmental outcome can be achieved
- 3. minimises contributions to greenhouse gas emissions
- 4. avoids clearing, or where avoidance is not reasonably possible, minimises clearing to:
  - a. conserve vegetation
  - b. avoid land degradation
  - c. avoid the loss of biodiversity
  - d. maintain ecological processes; and
- 5. avoids impacts on vegetation that is a matter of state environmental significance, and where avoidance is not reasonably possible, minimises and mitigates impacts and provides an offset for any acceptable significant residual impacts where appropriate. An offset is only appropriate for any acceptable significant residual impacts on vegetation that forms a connectivity area for development that is a coordinated project or for necessary environmental clearing (natural channel diversion and contaminants removal).

Notes: Guidance on how to comply with this code is provided in State Development Assessment Provisions Guidance material: State code 16: Native vegetation clearing, Department of Natural Resources and Mines, 2018.

Guidance for determining if the development will have a **significant residual impact** is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014 in section 3.1 (Regulated vegetation). Where the **significant residual impact** is considered an acceptable impact on the **matter of state environmental significance** and an **offset** is considered appropriate, the **offset** should be delivered in accordance with the Environmental offsets framework, Department of Environment and Heritage Protection, 2015.

Statutory note: Where an **offset** applies to development on Brisbane core port land, it only applies to areas within the area identified as E1 Conservation/Buffer, E2 Open Space or Buffer/Investigation in the Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see www.portbris.com.au.

# 16.2 Performance outcomes and acceptable outcomes

Development listed in table 16.2.1 should demonstrate compliance with the relevant provisions of tables 16.2.2 and 16.2.3.

Table 16.2.1: Development and relevant provisions of the code

Development	Relevant provisions of code
Operational work	
Public safety and relevant infrastructure	Table 16.2.2 – PO1 – PO4
activities	Table 16.2.3 – PO7, PO11, PO16, PO20, PO22 –
	PO24, PO27
Control non-native plants or declared pests	Table 16.2.2 – PO1 – PO4
	Table 16.2.3 – PO8, PO14, PO21, PO27, PO34 –
	PO35
Necessary environmental clearing	For land restoration and natural disaster
	preparation:
	Table 16.2.2 – PO1 – PO4
	Table 16.2.3 – PO9, PO12, PO18, PO20, PO22,
	PO25, PO27, PO32
	, ,

Development	Relevant provisions of code
	For natural channel diversion and contaminants
	<b>removal</b> : Table 16.2.2 – PO1 – PO4
	Table 16.2.3 – PO10, PO13, PO19, PO20, PO22,
	PO26, PO27, PO33
Extractive Industry	Table 16.2.2 – PO1 – PO4
	Table 16.2.3 – PO7, PO11, PO16, PO22 – PO24,
	PO27 – PO28
Encroachment	Table 16.2.2 – PO2 – PO4
	Table 16.2.3 – PO8, PO15, PO21, PO27, PO38 –
	PO39
Fodder harvesting	Table 16.2.2 – PO2 – PO4
	Table 16.2.3 – PO8, PO14, PO21 – PO22, PO24,
	PO40 – PO45
Thinning	Table 16.2.2 – PO2 – PO4
	Table 16.2.3 – PO8, PO14, PO21, PO27, PO36 –
	PO37
High value agriculture clearing	Table 16.2.2 – PO1 – PO4
	Table 16.2.3 – PO7, PO11, PO16, PO20, PO22 –
	PO24, PO27, PO29 – PO30
Irrigated high value agriculture clearing	Table 16.2.2 – PO1 – PO4
	Table 16.2.3 – PO7, PO11, PO16, PO20, PO22 –
On and implication of invalidation of a surface time.	PO24, PO27, PO29 – PO31
Coordinated project involving an extractive	Table 16.2.2 – PO1 – PO4
industry	Table 16.2.3 – PO7, PO11, PO17, PO20, PO22 –
On andimental sensitional in a bink scales	PO24, PO27 – PO28
Coordinated project involving high value	Table 16.2.2 – PO1 – PO4
agriculture clearing	Table 16.2.3 – PO7, PO11, PO17, PO20, PO22 –
Coordinated project involving irrigated high value	PO24, PO27, PO29 – PO30 Table 16.2.2 – PO1 – PO4
Coordinated project involving irrigated high value agriculture clearing	Table 16.2.3 – PO1 – PO4  Table 16.2.3 – PO7, PO11, PO17, PO20, PO22 –
agriculture clearing	PO24, PO27, PO29 – PO31
Coordinated project for all other purposes	Table 16.2.2 – PO1 – PO4
Coordinated project for all other purposes	Table 16.2.3 – PO7, PO11, PO17, PO20, PO22 –
	PO24, PO27
Material change of use and/or Reconfiguration of	,
Material change of use and reconfiguring a lot –	Table 16.2.2 – PO1 – PO4
coordinated project	Table 16.2.3 – PO7, PO11, PO17, PO20, PO22 –
	PO24, PO27
	If involving <b>extractive industry</b> , then also table
	16.2.2 – PO28
	If involving high value agriculture clearing, then
	also table 16.2.3 – PO29 – PO30
	If involving irrigated high value agriculture
	clearing, then also table 16.2.3 – PO29 – PO31
Material change of use and reconfiguring a lot	Table 16.2.2 – PO1 – PO4
involving extractive industry	Table 16.2.3 – PO7, PO11, PO16, PO22 – PO24,
	PO27 – PO28
Material change of use and reconfiguring a lot	Table 16.2.2 – PO1 – PO4
involving high value agriculture clearing	Table 16.2.3 – PO7, PO11, PO16, PO20, PO22 –
	PO24, PO27, PO29 – PO30
Material change of use and reconfiguring a lot	Table 16.2.2 – PO1 – PO4
involving irrigated high value agriculture clearing	Table 16.2.3 – PO7, PO11, PO16, PO20, PO22 –
	PO24, PO27, PO29 – PO31

Development	Relevant provisions of code
Material change of use and reconfiguring a lot for	Table 16.2.2 – PO5
which there will be no <b>clearing</b> as a result of the	
material change of use or reconfiguring a lot	
Material change of use and reconfiguring a lot for	Table 16.2.2 – PO1 – PO4 and PO6
which <b>clearing</b> is limited to <b>clearing</b> that could be	
done as <b>exempt clearing work</b> for the purpose of	
the development (as prescribed under schedule 21	
of the Planning Regulation 2017) prior to the	
material change of use or reconfiguring a lot	
application being approved.	
Material change of use and reconfiguring a lot for all	Table 16.2.2 – PO1 – PO4
other purposes	Table 16.2.3 – PO7, PO11, PO16, PO20, PO22 –
	PO24 and PO27

#### Table 16.2.2: General

Table 16.2.2: General	
Performance outcomes	Acceptable outcomes
Clearing avoids or minimises impacts	
PO1 Clearing and adverse impacts of clearing do	No acceptable outcome is prescribed.
not occur unless the application has demonstrated	
that the clearing and the adverse impacts of	
clearing have been:	
1. reasonably avoided; or	
reasonably minimised where it cannot be	
reasonably avoided.	
Clearing on land in particular circumstances	
PO2 Clearing is consistent with any notice	No acceptable outcome is prescribed.
requiring compliance on the land subject to the	'
development application, unless a better	
environmental outcome can be achieved.	
Note: The discharge of the vegetation management	
requirements under the notice requiring compliance can only	
occur in conjunction with the <b>better environmental outcome</b> being legally secured.	
being legally secured.	
Further guidance on meeting the requirements of a better	
environmental outcome can be found in State Development	
Assessment Provisions Guidance Material: State code 16: Native vegetation clearing, Department of Natural Resources and Mines,	
2017.	
PO3 Clearing is consistent with vegetation	No acceptable outcome is prescribed.
management requirements for particular	'
regulated areas unless a better environmental	
outcome can be achieved.	
Note: The discharge of the vegetation management	
requirements under the notice requiring compliance can only	
occur in conjunction with the <b>better environmental outcome</b> being legally secured.	
being legally secured.	
Further guidance on meeting the requirements of a better	
environmental outcome can be found in State code 16: Native	
vegetation clearing guidance material.	No acceptable outcome is proporited
PO4 Clearing of a legally secured offset area:	No acceptable outcome is prescribed.
1. is consistent with the <b>offset</b> delivery plan; or	
agreement for the offset area on the land	
subject to the development application; or	
2. only occurs if an additional <b>offset</b> is provided	
that is consistent with the <i>Environmental Offsets</i>	
Act 2014 and the relevant policy in the	
Queensland Environmental Offsets Policy,	

Performance outcomes	Acceptable outcomes
Department of Environment and Heritage	
Protection, 2014.	
Note: Reference to 'agreement' above includes the 'agreed	
delivery arrangement' for the <b>offset area</b> as well as instruments associated with the <b>legally secured offset area</b> . <b>Clearing</b> should	
be consistent with any agreement however described.	
Clearing of vegetation as a result of the material cl	hange of use or reconfiguration of a lot
PO5 Clearing as a result of a material change of	No acceptable outcome is prescribed.
use, or clearing as a result of reconfiguring a lot	·
does not occur.	
Clearing that could already be done under an exen	nption
PO6 Clearing does not occur unless it is clearing	No acceptable outcome is prescribed.
that could be done as <b>exempt clearing work</b> for the	
purpose of the development (as prescribed under	
schedule 21 of the Planning Regulation 2017) prior	
to the material change of use or reconfiguring a lot	
application being approved.	

Table 16.2.3: Specific		
Performance outcomes	Acceptable outcomes	
Clearing associated with wetlands (public safety and infrastructure, a coordinated project, extractive industry, high value agriculture clearing, and irrigated high value agriculture clearing)		
PO7 Clearing maintains the current extent of vegetation associated with any natural wetland to protect:  1. bank stability by protecting against bank erosion 2. water quality by filtering sediments, nutrients and other pollutants 3. aquatic habitat; and 4. terrestrial habitat.	AO7.1 Clearing does not occur in a natural wetland or within 100 metres of the defining bank of any natural wetland.  OR  AO7.2 Clearing within 100 metres of the defining bank of any natural wetland:  1. does not occur within 50 metres of the defining bank of any natural wetland; and  2. does not exceed widths in table 16.3.1 in this code.  OR	
	AO7.3 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, an offset is provided for any acceptable significant residual impact from clearing of vegetation associated with a natural wetland (matter of state environmental significance).	
Clearing associated with wetlands (necessary to c encroachment, thinning, fodder harvesting)		
PO8 Clearing maintains vegetation associated with a natural wetland to protect:  1. bank stability by protecting against bank erosion  2. water quality by filtering sediments, nutrients and other pollutants  3. aquatic habitat; and  4. terrestrial habitat.	Clearing necessary to control non-native plants or declared pests:  AO8.1 Where clearing is necessary to control non-native plants or declared pests, mechanical clearing does not occur within five metres of the defining bank of a natural wetland.  AND	
	AO8.2 Clearing only occurs:	

Performance outcomes	Acceptable outcomes
	<ol> <li>within a 1.5 metre radius from the base of the stem of individual non-native or declared pests; or</li> <li>to the extent necessary to provide access for the control of the non-native plants or declared pests.</li> </ol>
	AND
	AO8.3 Clearing for access tracks running parallel to a natural wetland is not to be located within 10 metres of the defining bank of a natural wetland.
	AND
	Clearing for thinning:
	<ul> <li>AO8.4 Mechanical clearing does not occur in any of the following areas:</li> <li>1. inside the defining bank of a natural wetland;</li> <li>2. within 50 metres of the defining bank of a natural wetland.</li> </ul>
	AND
	Clearing for encroachment:
	AO8.5 Mechanical clearing does not occur within 20 metres of the defining bank of a natural wetland.
	AND
	AO8.6 Clearing does not include the application of root absorbed broad spectrum herbicides within 50 metres of the defining bank of a natural wetland or within the distance specified from a wetland in the directions for use on the label for the product, whichever is the greater.
	AND
	Clearing for fodder harvesting:
	AO8.7 Mechanical clearing does not occur in any of the following areas:  1. inside the defining bank of any natural wetland; and  2. within 20 metres of the defining bank of any natural wetland.
	AND
	AO8.8 Mechanical clearing that is strip harvesting or block harvesting does not occur in any of the following areas: 1. inside the defining bank of any natural wetland; and

Performance outcomes	Acceptable outcomes
	<ol><li>within 100 metres of the defining bank of any natural wetland.</li></ol>
Clearing associated with wetlands (necessary env	
disaster preparation)	
PO9 Clearing maintains vegetation associated with any natural wetland or rehabilitates the cleared area to protect:  1. water quality by filtering sediments, nutrients and other pollutants  2. aquatic habitat; and  3. terrestrial habitat.	AO9.1 Clearing does not occur in, or within 100 metres of, the defining bank of any natural wetland.  OR  AO9.2 Clearing within 100 metres of the defining bank of any natural wetland and:  1. does not occur within 50 metres of the defining bank of the natural wetland; and  2. does not exceed the widths in table 16.3.1 of this code.  OR  AO9.3 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, the cleared area is rehabilitated.
Clearing associated with wetlands (necessary env	,
and contaminants removal)	nonnenai dearing - natural chainei diversion
PO10 Clearing maintains the current extent of vegetation associated with any natural wetland or rehabilitates the cleared area to protect:  1. bank stability by protecting against bank erosion 2. water quality by filtering sediments, nutrients and other pollutants 3. aquatic habitat; and 4. terrestrial habitat.	AO10.1 Clearing does not occur in, or within 100 metres of the defining bank of any natural wetland.  OR  AO10.2 Clearing within 100 metres of the defining bank of any natural wetland and:  1. does not occur within 50 metres of the defining bank of any natural wetland; and  2. does not exceed the widths in table 16.3.1 of this code.  OR  AO10.3 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, the cleared area is rehabilitated.  OR  AO10.4 Where clearing is for natural channel diversion or contaminants removal, and clearing cannot be reasonably avoided, and:  1. clearing has been reasonably minimised; and  2. the cleared area cannot be reasonably rehabilitated, an offset is provided for any acceptable significant residual impact from clearing of vegetation associated with a natural wetland (a matter of state environmental significance).

#### **Acceptable outcomes**

Clearing associated with watercourses and drainage features (public safety and relevant infrastructure activities, coordinated project, extractive industry, high value agriculture clearing, irrigated high value agriculture clearing)

PO11 Clearing maintains the current extent of vegetation associated with any watercourse or drainage feature to protect:

- 1. bank stability by protecting against bank erosion
- 2. water quality by filtering sediments, nutrients and other pollutants
- 3. aquatic habitat; and
- 4. terrestrial habitat.

**AO11.1 Clearing** does not occur in any watercourse or drainage feature, or within the relevant distance of the defining bank of any watercourse or drainage feature in table 16.3.2 of this code.

OR

AO11.2 Clearing within any watercourse or drainage feature, or within the relevant distance of the defining bank of any watercourse or drainage feature in table 16.3.2 of this code:

- does not exceed the widths in table 16.3.1 of this code; and
- 2. does not occur within five metres of the **defining bank**, unless **clearing** is required into or across the **watercourse** or **drainage feature**.

OR

AO11.3 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, an offset is provided for any acceptable significant residual impact from clearing of vegetation associated with any watercourse or drainage feature (a matter of state environmental significance).

Clearing associated with watercourses and drainage features (necessary environmental clearingland restoration and natural disaster preparation)

**PO12 Clearing** maintains **vegetation** associated with any **watercourse** or **drainage feature** or **rehabilitates** the **cleared** area to protect:

- 1. bank stability by protecting against bank erosion
- 2. water quality by filtering sediments, nutrients and other pollutants
- 3. aquatic habitat; and
- 4. terrestrial habitat.

**AO12.1 Clearing** does not occur within any watercourse or drainage feature or within the relevant distances from each defining bank of any watercourse or drainage feature in table 16.3.2 of this code.

OR

AO12.2 Clearing in any watercourse or drainage feature, or within the relevant distance of the defining bank of any watercourse or drainage feature in table 16.3.2 of this code:

- 1. does not exceed the widths in table 16.3.1 of this code; and
- 2. does not occur within five metres of the **defining bank**, unless **clearing** is required into or across the **watercourse** or **drainage feature**.

OR

**AO12.3** Where **clearing** cannot be reasonably avoided, and **clearing** has been reasonably minimised, the cleared area is **rehabilitated**.

Clearing associated with watercourses and drainage features (necessary environmental clearing – natural channel diversion, and contaminants removal)

PO13 Clearing maintains the current extent of vegetation associated with any watercourse or

AO13.1 Clearing does not occur within any watercourse or drainage feature or within the

### **drainage feature** or **rehabilitates** the **cleared** area to protect:

- 1. bank stability by protecting against bank erosion
- 2. water quality by filtering sediments, nutrients and other pollutants
- 3. aquatic habitat; and
- 4. terrestrial habitat.

#### **Acceptable outcomes**

relevant distances from each **defining bank** of any **watercourse** or **drainage feature** in table 16.3.2 of this code.

OR

AO13.2 Clearing in any watercourse or drainage feature, or within the relevant distance of the defining bank of any watercourse or drainage feature in table 16.3.2 of this code:

- does not exceed the widths in table 16.3.1 of this code: and
- 2. does not occur within five metres of the **defining bank**, unless **clearing** is required into or across the **watercourse** or **drainage feature**.

OR

**AO13.3** Where **clearing** cannot be reasonably avoided, and:

- 1. clearing has been reasonably minimised; and
- the cleared area cannot be reasonably rehabilitated

an offset is provided for any acceptable significant residual impact from clearing of vegetation associated with a watercourse or drainage feature (a matter of state environmental significance).

### Clearing associated with watercourses or drainage features (necessary to control non-native plants or declared pests, thinning, fodder harvesting)

**PO14 Clearing** maintains **vegetation** associated with any **watercourse** or **drainage feature** to protect:

- 1. bank stability by protecting against bank erosion
- 2. water quality by filtering sediments, nutrients and other pollutants
- 3. aquatic habitat; and
- 4. terrestrial habitat.

**Clearing** necessary to control non-native plants or **declared pests**:

**AO14.1 Mechanical clearing** does not occur within 20 metres of the **defining bank** of a **watercourse** or **drainage feature**.

**AND** 

#### AO14.2 Clearing only occurs:

- within a 1.5 metre radius from the base of the stem of individual non-native or declared pests; or
- to the extent necessary to provide access for the control of the non-native plant or declared pest.

AND

**AO14.3 Clearing** for access tracks running parallel to a **watercourse** or **drainage feature** is not to be located within 10 metres of the **defining bank** of the **watercourse** or **drainage feature**.

#### **Clearing** for **thinning**:

**AO14.4 Mechanical clearing** does not occur in any of the following areas:

 inside the defining bank of any watercourse or drainage feature;

Performance outcomes	Acceptable outcomes
	<ol> <li>within 10 metres of the defining bank of a watercourse or drainage feature that is a stream order 1 or 2 watercourse or drainage feature.</li> <li>within 30 metres of the defining bank of a watercourse or drainage feature that is a stream order 3 or 4 watercourse or drainage feature.</li> <li>within 50 metres of the defining bank of a watercourse or drainage feature that is a stream order 5 or more watercourse or drainage feature.</li> </ol>
	Clearing for fodder harvesting:
	AO14.5 Mechanical clearing does not occur in any of the following areas:  1. inside the defining bank of any watercourse or drainage feature; and  2. within 20 metres of the defining bank of any watercourse or drainage feature.
	AND
	AO14.6 Mechanical clearing that is strip harvesting or block harvesting does not occur in any of the following areas: 1. inside the defining bank of any watercourse or drainage feature; and 2. within 100 metres of the defining bank of any watercourse or drainage feature.
Clearing associated with watercourses or drainage	
<ol> <li>PO15 Clearing of encroachment maintains:</li> <li>bank stability by protecting against bank erosion; and</li> <li>water quality by filtering sediments, nutrients and other pollutants; and</li> </ol>	AO15.1 Mechanical clearing does not occur within 20 metres of the defining bank of a watercourse or drainage feature.  AND
<ul><li>3. aquatic habitat; and</li><li>4. terrestrial habitat.</li></ul>	AO15.2 Clearing does not include the application of root-absorbed broad spectrum herbicides within 50 metres of the defining bank of a watercourse or drainage feature or within the distance specified from a watercourse or drainage feature in the directions for use on the label for the product, whichever is the greater.
Maintaining connectivity (public safety and relevan	
high value agriculture clearing, irrigated high value PO16 In consideration of vegetation on the land subject to the development application and on adjacent land, sufficient vegetation is retained to maintain ecological processes and remains in the landscape despite threatening processes.  Connectivity areas (coordinated project)	e agriculture clearing)  AO16.1 Clearing occurs in accordance with table 16.3.3 in this code.
PO17 In consideration of vegetation on the land	AO17.1 Clearing occurs in accordance with table
subject to the development application and on adjacent land:	16.3.3 of this code.
sufficient vegetation is retained to maintain     ecological processes and remains in the     landscape despite threatening processes; or	OR

2. where this not reasonably possible, the applicant provides an **offset**.

#### Acceptable outcomes

AO17.2 Where clearing cannot be reasonably avoided; and clearing has been reasonably minimised; an offset is provided for any acceptable significant residual impact from clearing of vegetation that forms a connectivity area (a matter of state environmental significance).

### Maintaining connectivity (necessary environmental clearing - land restoration and natural disaster preparation)

**PO18** In consideration of **vegetation** on the land subject to the development application and on adjacent land, sufficient **vegetation** is retained to maintain **ecological processes** and remains in the landscape despite **threatening processes**, or where this is not reasonably possible, the cleared area is **rehabilitated**.

**AO18.1 Clearing** occurs in accordance with table 16.3.3 of this code.

OR

**AO18.2** Where **clearing** cannot be reasonably avoided, and **clearing** has been reasonably minimised, the **cleared** area is **rehabilitated**.

### Connectivity areas (necessary environmental clearing – natural channel diversion and contaminants removal)

**PO19** In consideration of **vegetation** on the land subject to the development application and on adjacent land:

- sufficient vegetation is retained to maintain ecological processes and remains in the landscape despite threatening processes; or
- 2. where this is not reasonably possible, the applicant **rehabilitates** the **cleared** area; or
- where this not reasonably possible, the applicant provides an offset.

**AO19.1 Clearing** occurs in accordance with table 16.3.3 of this code.

OR

**AO19.2** Where **clearing** cannot be reasonably avoided, and **clearing** has been reasonably minimised, the **cleared** area is **rehabilitated**.

OR

**AO19.3** Where **clearing** cannot be reasonably avoided, and:

- 1. clearing has been reasonably minimised; and
- the cleared area cannot be reasonably rehabilitated

an offset is provided for any acceptable significant residual impact from clearing of vegetation that forms a connectivity area (a matter of state environmental significance).

Soil erosion (public safety and relevant infrastructure activities, coordinated project, high value agriculture clearing, irrigated high value agriculture clearing, necessary environmental clearing)

PO20 Clearing does not result in:

- accelerated soil erosion including, but not limited to – mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and
- any associated loss of chemical, physical or biological fertility – including, but not limited to water holding capacity, soil structure, organic matter, soil biology, and nutrients, within or outside the land the subject of the development application.

**AO20.1 Clearing** is undertaken in accordance with an erosion and sediment control plan, which includes measures to ensure the rates of soil loss and sediment movement are the same or less than those prior to the proposed development.

OR

**AO20.2** The local government is the assessment manager for the development application.

Note: For guidance on developing a sediment and erosion control plan, please refer to the Best Practice Erosion and Sediment Control Document, IECA, 2008.

### Soil erosion (necessary to control non-native plants or declared pests, thinning, encroachment, fodder harvesting)

PO21 Clearing does not result in:

 accelerated soil erosion – including, but not limited to - mass movement, gully erosion, rill **Clearing** necessary to control non-native plants or **declared pests**:

erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and

 any associated loss of chemical, physical or biological fertility – including, but not limited to water holding capacity, soil structure, organic matter, soil biology and nutrients, within or outside the land subject of the development application.

#### Acceptable outcomes

**AO21.1 Mechanical clearing** retains 50 per cent of the ground cover (dead or alive) in each 50 by 50 metre (0.25 hectare) area.

**AND** 

**AO21.2** New access tracks to gain access to a nonnative plant or **declared pest** infestation do not exceed five metres in width or de-stabilise the banks of any **watercourse** or **drainage feature** as a result of crossing, construction or use.

AND

#### Clearing for thinning:

#### AO21.3 Mechanical clearing does not:

- occur in a regional ecosystem in table 16.3.6 of this code that states 'mechanical thinning not permitted';
- disturb more than 50 per cent of the ground surface or result in any hectare less than 50 per cent ground cover, whether dead or alive; and
- 3. occur on **slopes** in excess of five per cent.

AND

**AO21.4 Mechanical clearing** does not occur within 50 metres of an area of **soil erosion and instability**.

AND

#### Clearing for encroachment:

#### AO21.5 Mechanical clearing:

- 1. is limited to **slopes** less than five per cent; and
- retains 50 per cent of the ground cover (dead or alive) in each 50 by 50 metre (0.25 hectare) area.

AND

#### **Clearing** for **fodder harvesting**:

**AO21.6 Mechanical clearing** does not occur on a **slope** greater than five percent.

OR

**AO21.7** Mechanical clearing does not occur within 50 metres of an areas of **soil erosion and instability**.

Salinity (public safety and relevant infrastructure activities, coordinated project, extractive industry, high value agriculture clearing, irrigated high value agriculture clearing, necessary environmental clearing, fodder harvesting)

PO22 Clearing does not contribute to or accelerate land degradation through waterlogging, or through

**AO22.1 Clearing** does not occur within 100 metres of a salinity expression area.

Devformance outcomes	Assentable sutesmes
Performance outcomes the salinisation of groundwater, surface water or	Acceptable outcomes
soil.	
Conserving endangered and of concern regional e infrastructure activities, coordinated project, extra irrigated high value agriculture clearing)	
PO23 Clearing maintains the current extent of endangered regional ecosystems and of concern regional ecosystems.	AO23.1 Clearing does not occur in an endangered regional ecosystem or an of concern regional ecosystem.
	OR
	AO23.2 Total clearing of endangered regional ecosystems and of concern regional ecosystems combined does not exceed the widths prescribed in table 16.3.1 of this code.
	OR
	AO23.3 Total clearing of endangered regional ecosystems and of concern regional ecosystems combined does not exceed areas prescribed in table 16.3.1 of this code.
	OR
	AO23.4 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, an offset is provided for any acceptable significant residual impact from clearing of endangered regional ecosystems and of concern regional ecosystems (a matter of state environmental significance).
Essential habitat (public safety and relevant infras industry, high value agriculture clearing and irriga harvesting)	tructure activities, coordinated project, extractive
PO24 Clearing maintains the current extent of essential habitat.	AO24.1 Clearing does not occur in essential habitat.
	OR
	AO24.2 Clearing in essential habitat does not exceed the widths prescribed in table 16.3.1 of this code.
	OR
	AO24.3 Clearing in essential habitat does not exceed the areas prescribed in table 16.3.1 of this code.
	OR
	AO24.4 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, an offset is provided for any acceptable significant residual impact from clearing of essential habitat (a matter of state environmental significance).

#### **Acceptable outcomes**

Essential habitat (necessary environmental clearing – land restoration and natural disaster preparation)

**PO25 Clearing** does not occur in **essential habitat**, or where this is not reasonably possible, the applicant **rehabilitates** the **cleared** area.

AO25.1 Clearing does not occur in essential habitat.

OR

**AO25.2 Clearing** in **essential habitat** does not exceed the widths prescribed in table 16.3.1 of this code.

OR

**AO25.3 Clearing** in **essential habitat** does not exceed the areas prescribed in table 16.3.1 of this code.

OR

**AO25.4** Where **clearing** cannot be reasonably avoided, and **clearing** has been reasonably minimised, the cleared area is **rehabilitated**.

Essential habitat (necessary environmental clearing – natural channel diversion and contaminants removal)

PO26 Clearing does not occur in essential habitat, or where this is not reasonably possible, the applicant rehabilitates the cleared area, or maintains the current extent of essential habitat.

AO26.1 Clearing does not occur in essential habitat.

OR

**AO26.2 Clearing** in **essential habitat** does not exceed the widths prescribed in table 16.3.1 of this code.

OR

**AO26.3 Clearing** in **essential habitat** does not exceed the areas prescribed in table 16.3.1 of this code.

OR

**AO26.4** Where **clearing** cannot be reasonably avoided, and **clearing** has been reasonably minimised, the cleared area is **rehabilitated**.

OR

**AO26.5** Where **clearing** cannot be reasonably avoided, and:

- 1. clearing has been reasonably minimised; and
- 2. the cleared area cannot be reasonably rehabilitated

an **offset** is provided for any acceptable **significant residual impact** from **clearing** of **essential habitat** (a **matter of state environmental significance**).

Acid sulfate soils (public safety and relevant infrastructure activities, coordinated project, extractive industry, high value agriculture clearing, irrigated high value agriculture clearing, necessary environmental clearing, necessary to control non-native plants or declared pests, thinning, encroachment)

#### Performance outcomes Acceptable outcomes PO27 Clearing does not result in, or accelerate, AO27.1 Clearing does not occur in land zone 1, disturbance of acid sulfate soils or changes to the land zone 2 or land zone 3. hydrology of the location that will result in either of the following: OR 1. aeration of horizons containing iron sulphides; or 2. mobilisation of acid or metals. AO27.2 Clearing in land zone 1, land zone 2 or land zone 3 in areas below the five metre Australian Height Datum only occurs where: 1. it does not involve **mechanical clearing**: and 2. acid sulfate soils are managed consistent with the State Planning Policy, Department of Infrastructure, Local Government and Planning, July 2017, and with the soil management guidelines in the Queensland Acid Sulfate Soil Technical Manual, Department of Science Information Technology Innovation and the Arts, 2014. OR **AO27.3** The local government is the assessment manager for the development application. Clearing is staged (extractive industry) PO28 Clearing: No acceptable outcome is prescribed. 1. is staged in line with operational needs that restrict clearing to the current operational area only occurs in the area from which material will be extracted, and any reasonably associated infrastructure, within the term of the development approval; and does not occur without required permits. Clearing for agriculture (coordinated project, high value agriculture clearing, irrigated high value agriculture clearing) PO29 Clearing only occurs where the land is No acceptable outcome is prescribed. suitable for agriculture having regard to topography, climate and soil attributes. Note: Guidance for determining land suitability is provided in the Guidelines for meeting the land suitability and economic viability requirements for high value and irrigated high value agriculture applications, Department of Natural Resources and Mines, 2015. PO30 Clearing only occurs where there is no No acceptable outcome is prescribed. alternative area on the land subject to the development application for the clearing. PO31 For applications for irrigated high value No acceptable outcome is prescribed. agriculture clearing, the owner of the land is an eligible owner who has, or may have, access to enough water for establishing, cultivating and harvesting the **crops** to which the **clearing** relates. Clearing for necessary environmental clearing – land restoration and natural disaster preparation PO32 Clearing does not occur, or where this is not AO32.1 Clearing maintains the natural floristic reasonably possible, the applicant rehabilitates the composition and range of sizes across the cleared area. application area. OR AO32.2 Clearing does not exceed the widths prescribed in table 16.3.1 of this code.

Performance outcomes	Acceptable outcomes
	OR
	AO32.3 Clearing does not exceed the areas prescribed in table 16.3.1 of this code.
	OR
	AO32.4 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, the cleared area is rehabilitated.
Clearing for necessary environmental clearing - na	atural channel diversion and contaminants
PO33 Clearing does not occur, or where this is not reasonably possible, the applicant rehabilitates the cleared area or maintains the current extent of vegetation.	AO33.1 Clearing maintains the natural floristic composition and range of sizes across the application area.
	OR
	AO33.2 Clearing does not exceed the widths prescribed in table 16.3.1 of this code.
	OR
	AO33.3 Clearing does not exceed the areas prescribed in table 16.3.1 of this code.
	OR
	AO33.4 Where clearing cannot be reasonably avoided, and clearing has been reasonably minimised, the endangered regional ecosystems and of concern regional ecosystems are rehabilitated.
	OR
	AO33.5 Where clearing an endangered regional ecosystem or of concern regional ecosystem cannot be reasonably avoided, minimised or rehabilitated, an offset is provided for any acceptable significant residual impact from clearing of an endangered regional ecosystem or of concern regional ecosystem (a matter of state environmental significance).
Conserving remnant vegetation that are regional e	cosystems (necessary to control non-native
plants or declared pests) PO34 Clearing activities:	AO34.1 Mechanical clearing does not exceed the
maintain the natural floristic composition and range of sizes of each species of the regional ecosystem evenly spaced across the	limitations defined in table 16.3.4 of this code.  OR
application area; and 2. retain mature trees.	AO34.2 Root-absorbed broad spectrum herbicides are not: 1. applied via aerial application; or 2. ground applied on a broad acre basis; or 3. used inconsistently with the product directions. essary to control non-native plants or declared

pests)

# Performance outcomes PO35 Clearing retains canopy vegetation in dense regional ecosystems.

#### Acceptable outcomes

**AO35.1 Clearing** does not occur in **regional ecosystems** listed in table 16.3.5 of this code.

OR

**AO35.2 Clearing** and associated soil disturbance in **regional ecosystems** listed in table 16.3.5 of this code only occurs:

- within a 1.5 metre radius from the base of the stem of individual non-native plants or declared pests;
- to the extent necessary to provide access for the control of the non-native plants or declared pests.

#### Restoring the regional ecosystem (thinning)

#### PO36 Clearing activities:

- restore the natural floristic composition and range of sizes of each species of the regional ecosystem evenly spaced across the application area; and
- retain mature trees, habitat trees and tall immature trees and thickets.

**AO36.1 Clearing** does not occur in any of the following areas:

- 1. in thickets;
- for mechanical clearing, within five metres or less from the trunk of a mature tree, habitat tree or tall immature tree.

AND

#### AO36.2 Clearing retains:

- 1. all mature trees and habitat trees:
- 2. a full range of sizes and species typical of the regional ecosystem in the area; and
- 3. where the number of mature trees plus habitat trees is less than 20 per hectare, tall immature trees to total 20 mature trees, habitat trees and tall immature trees per hectare.

AND

**AO36.3** If **clearing immature trees**, retain **immature trees** distributed in a pattern that is as natural as possible and of at least the density specified in table 16.3.6 of this code.

AND

#### AO36.4 If clearing low shrubs:

- in regional ecosystems where clearing is restricted to low shrubs as specified in table 16.3.6 of this code – clearing retains all immature trees;
- in regional ecosystems where clearing is not restricted to low shrubs as specified in table 16.3.6 – clearing retains at least the number of immature trees specified in table 16.3.6; and
- 3. **clearing** retains at least 10 per cent of the predominate species that have thickened.

AND

Performance outcomes	Acceptable outcomes					
Performance outcomes	AO36.5 Mechanical clearing does not result in					
	debris being stacked or pushed against a <b>mature</b>					
	tree, habitat tree or tall immature tree.					
	i i co, nabitat tree or tan inimature tree.					
	AND					
	AO26 6 Clearing is not undertaken by:					
	AO36.6 Clearing is not undertaken by: 1. aerial application of any herbicide;					
	<ol> <li>application of any herbicide,</li> <li>application of a root-absorbed broad</li> </ol>					
	spectrum herbicide.					
	spectium nerbicide.					
	AND					
	AO36.7 Chemical clearing does not occur within					
	five metres of the trunk of a mature tree, habitat					
	tree or tall immature tree.					
Clearing limited to specific regional ecosystems a						
PO37 Clearing must be for the purpose of restoring	No acceptable outcome is prescribed.					
the remnant <b>regional ecosystem</b> and only occur if	ino acceptable outcome is prescribed.					
all of the following apply:						
clearing is in regional ecosystems prescribed						
in table 16.3.6 of this code; and						
2. <b>clearing</b> is in accordance with the <b>clearing</b>						
restrictions for the regional ecosystem						
prescribed in table 16.3.6 of this code;						
unless the <b>clearing</b> is solely for removing native						
plants not naturally occurring within the <b>regional</b>						
ecosystem.						
Clearing is limited to specific regional ecosystems	(encroachment)					
	(CHC) CACHILICIU					
PO38 Clearing of encroachment does not occur,	No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in						
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.						
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)	No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.						
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional	No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:	No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem	No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees	No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove;	No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and	No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees 3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder harvesting is limited to:  1. the extent necessary to provide fodder for stock;	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees 3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder harvesting is limited to:  1. the extent necessary to provide fodder for stock; and	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder harvesting is limited to:  1. the extent necessary to provide fodder for stock; and  2. areas where the stock is located, and the stock	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder harvesting is limited to:  1. the extent necessary to provide fodder for stock; and  2. areas where the stock is located, and the stock has sufficient water.	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.  rvesting)  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder harvesting is limited to:  1. the extent necessary to provide fodder for stock; and  2. areas where the stock is located, and the stock has sufficient water.  PO41 Clearing must only occur:	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder harvesting is limited to:  1. the extent necessary to provide fodder for stock; and  2. areas where the stock is located, and the stock has sufficient water.  PO41 Clearing must only occur:  1. in regional ecosystems listed in table 16.3.8 or	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.  rvesting)  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder harvesting (fodder harvesting) (fodder harvestin	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.  rvesting)  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder ha PO40 Clearing is limited to:  1. the extent necessary to provide fodder for stock; and  2. areas where the stock is located, and the stock has sufficient water.  PO41 Clearing must only occur:  1. in regional ecosystems listed in table 16.3.8 or table 16.3.9 of this code; and  2. in accordance with the harvesting method	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.  rvesting)  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, nonencroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder harvesting (fodder harvesting) (fodder harvesting	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.  rvesting)  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees 3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, non-encroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder ha PO40 Clearing is limited to: 1. the extent necessary to provide fodder for stock; and 2. areas where the stock is located, and the stock has sufficient water.  PO41 Clearing must only occur: 1. in regional ecosystems listed in table 16.3.8 or table 16.3.9 of this code; and 2. in accordance with the harvesting method limitations for the regional ecosystem listed in table 16.3.8 or table 16.3.9 of this code.	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.  rvesting)  No acceptable outcome is prescribed.  No acceptable outcome is prescribed.					
PO38 Clearing of encroachment does not occur, other than in the regional ecosystems listed in table 16.3.7 of this code.  Retained trees (encroachment)  PO39 Clearing of encroachment:  1. results in the restoration of the regional ecosystem  2. retains mature trees and habitat trees  3. retains all woody vegetation within a grove; and  4. retains representatives of all immature, nonencroaching species in a natural pattern.  Limits to clearing for fodder harvesting (fodder harvesting (fodder harvesting) (fodder harvesting	No acceptable outcome is prescribed.  No acceptable outcome is prescribed.  rvesting)  No acceptable outcome is prescribed.					

#### **Conserving vegetation (fodder harvesting)**

**PO43 Clearing** is carried out in a way that conserves:

- 1. remnant vegetation in perpetuity; and
- 2. the **regional ecosystem** in which the **vegetation** is situated.

**AO43.1 Clearing** does not result in the removal of non-fodder species with a height of four metres or more.

#### A043.2 Selective harvesting:

- retains all non-fodder species except where the damage is an unavoidable consequence of clearing the selected fodder tree; and
- when using a chainsaw in regionals
   ecosystems listed in table 16.3.8 of this code,
   retains at least one fodder tree for every fodder
   tree cleared; and
- 3. in **least concern regional ecosystems** listed in table 16.3.9 of this code, retains at least one fodder tree for each fodder tree cleared; and
- 4. in **of concern regional ecosystems** listed in table 16.3.9 of this code, retains at least two fodder trees for each fodder tree cleared.

#### AND

#### AO43.3 Strip harvesting and block harvesting:

- where **fodder harvesting** has previously occurred in an area of a lot, only occurs if all of the following apply:
  - a. the **vegetation** has not been **cleared** in the last 10 years; and
  - the average height of the fodder trees is at least 70 per cent of the height of the tallest stands of fodder species in the regional ecosystem; and
  - c. the fodder trees that were previously harvested have now attained an average height of at least 4 metres.
- 2. aligns **clearing** along the contour where practical; and
- 3. does not occur in patches of **regional ecosystems** that are less than 10 hectares in area or less than 500 metres wide.

#### AND

#### AO43.4 Strip harvesting:

- 1. does not result in any **strip harvesting area** exceeding 50 metres in width; and
- 2. results in all strip retention areas:
  - a. being preserved along the length of strip harvest areas to a width of at least 1.5 times that of the adjacent strip harvest area; and
  - containing fodder species with an average height of at least four metres; and
- does not result in clearing for machinery access between strip harvest areas exceeding 15 metres in width.

#### AND

#### AO43.5 Block harvesting:

	does not result in any block harvest area
	exceeding one hectare; and
	2. results in <b>block retention areas</b> :
	a. being preserved between <b>block harvest</b>
	areas in accordance with the widths
	specified in table 16.3.10 of this code;
	and
	<ul> <li>containing fodder species with an average height of at least four metres;</li> </ul>
	and
	3. does not result in <b>clearing</b> for machinery access
	between <b>block harvest areas</b> exceeding 10
	metres in width.
Cleared vegetation (fodder harvesting)	
PO44 Fodder harvesting is carried out in a way	No acceptable outcome is prescribed.
that results in the woody biomass of the <b>cleared</b>	
vegetation remaining where it is cleared.	
Conserving the fodder resource (fodder harvestin	
PO45 Fodder harvesting is carried out in a way	AO45.1 Within any 10 year period, commencing
that will conserve the fodder resource.	from the expiry date of any development approval or
	any Accepted Development Vegetation Clearing
	Code notification, <b>clearing</b> does not occur:
	1. more than once in the same area of a lot; and
	2. in more than 50 per cent of the area of the
	regional ecosystem listed in table 16.3.8 and
	table 16.3.9 of this code on the lot; and
	3. in areas required to be retained under this code,
	a development approval or any Accepted
	Development Vegetation Clearing Code.

### 16.3 Reference tables

#### **Table 16.3.1**

Clearing limits per regional ecosystem structure category						
Structure category Width (metres) Area (hectares)						
Dense and mid-dense*	10	0.5				
Sparse and very sparse*	20	2				
Grassland*	25	5				

<sup>\*</sup>Note: Refer to the structure category within the Regional ecosystem database, Department of Environment and Heritage Protection, 2016

Table 10.5.2	
Distance from defining banks of watercourses and	l drainage features
Stream order	Distance from the defining bank of a watercourse or drainage feature (metres)
Coastal bioregions and subregions	
1 or 2	10
3 or 4	25
5 or greater	50
Non-coastal bioregions and subregions	
1 or 2	25
3 or 4	50
5 or greater	100

	10.0.0	
Ma	aintaining connectivity areas	
Co	pastal bioregions and subregions	Non-coastal bioregions and subregions
Cle	earing does not:	Clearing does not:
1.	occur in areas of <b>vegetation</b> that are less than 10 hectares	occur in areas of <b>vegetation</b> that are less than     50 hectares
2.	reduce the extent of <b>vegetation</b> to less than 10 hectares	<ol> <li>reduce the extent of <b>vegetation</b> to less than</li> <li>hectares</li> </ol>
3.	occur in areas of <b>vegetation</b> less than 100 metres wide	occur in areas of <b>vegetation</b> less than 200 metres wide
4.	reduce the width of <b>vegetation</b> to less than 100 metres; and	4. reduce the width of <b>vegetation</b> to less than 200 metres; and
5.	occur where the extent of <b>vegetation</b> on the subject lot(s) is reduced to, or less than, 30 per cent of the total area of the lot(s).	5. occur where the extent of <b>vegetation</b> on the subject lot(s) is reduced to, or less than, 30 per cent of the total area of the lot(s).

#### **Table 16.3.4**

14516 10.5.4	
Clearing limitations for mechanical weed control	
Estimated per cent weed cover	Clearing limitations
Up to 50 per cent	Retain all <b>habitat trees</b> and <b>retained trees</b> and at least 50 per cent of the trees with a diameter of 15 centimetres – 19 centimetres, measured at breast height.
More than 50 per cent	Retain all retained trees or habitat trees.

Donce regio	nal agasystame				
	nal ecosystems	7.0.0	7.40.40	0.40.47	10.00
3.2.1	3.10.17	7.8.2	7.12.16	8.12.17	12.2.3
3.2.2	3.10.18	7.8.3	7.12.17	8.12.18	12.2.12
3.2.11	3.10.19	7.8.4	7.12.19	8.12.19	12.2.21
3.2.12	3.11.1	7.8.11	7.12.20	8.12.28	12.3.1
3.2.13	3.11.2	7.8.12	7.12.37	8.12.29	12.3.13
3.2.17	3.11.3	7.8.13	7.12.39	8.12.30	12.5.13
3.2.21	3.12.1	7.8.14	7.12.40	9.5.2	12.8.3
3.2.28	3.12.2	7.11.1	7.12.41	9.8.3	12.8.4
3.2.29	3.12.20	7.11.2	7.12.42	9.8.7	12.8.5
3.2.30	3.12.21	7.11.3	7.12.43	9.11.8	12.8.6
3.2.31	3.12.22	7.11.6	7.12.44	9.11.9	12.8.7
3.3.1	3.12.35	7.11.7	7.12.45	9.12.8	12.8.13
3.3.2	3.12.36	7.11.8	7.12.46	9.12.34	12.8.18
3.3.3	3.12.3	7.11.10	7.12.47	11.2.3	12.8.21
3.3.4	3.12.4	7.11.12	7.12.48	11.3.11	12.8.22
3.3.5	3.12.5	7.11.14	7.12.49	11.4.1	12.9-10.15
3.3.6	3.12.6	7.11.23	7.12.50	11.4.6	12.9-10.16
3.3.7	7.2.1	7.11.24	7.12.64	11.5.11	12.11.1
3.3.38	7.2.2	7.11.25	7.12.68	11.5.15	12.11.4
3.3.39	7.2.5	7.11.27	8.2.2	11.5.18	12.11.10
3.3.40	7.2.6	7.11.28	8.2.4	11.7.5	12.11.11
3.3.55	7.2.9	7.11.29	8.2.5	11.8.3	12.11.12
3.3.68	7.2.10	7.11.30	8.3.1	11.8.6	12.11.13
3.5.3	7.3.3	7.11.36	8.3.9	11.8.7	12.12.1
3.5.4	7.3.4	7.12.1	8.3.10	11.8.13	12.12.10
3.5.20	7.3.5	7.12.2	8.8.1	11.9.4	12.12.13
3.5.32	7.3.10	7.12.4	8.10.1	11.9.8	12.12.16
3.7.1	7.3.17	7.12.5	8.11.2	11.10.8	12.12.17
3.8.1	7.3.23	7.12.6	8.11.10	11.11.5	12.12.18
3.8.2	7.3.35	7.12.7	8.12.1	11.11.18	13.11.7

Dense region	onal ecosystems				
3.8.5	7.3.36	7.12.9	8.12.2	11.11.21	13.12.6
3.10.1	7.3.37	7.12.10	8.12.3	11.12.4	
3.10.2	7.3.38	7.12.11	8.12.10	11.12.18	
3.10.3	7.3.49	7.12.12	8.12.11	12.2.1	
3.10.5	7.8.1	7.12.13	8.12.16	12.2.2	

<b>Table 16.3.6</b>						
Thinning –	Prescribed re	egional ecosy	stems and res	strictions		
					and bioregion.	Use this table to
						ates and any clearing
restrictions.						
Very sparse	e regional eco	osystems				
			e tree density r	nust be at leas	st 200 trees pe	r hectare after clearing.
Bioregion					•	Clearing restrictions
North West	Highlands					
1.5.14	1.5.6					
Gulf Plains		l .	l		l	
2.3.9	2.3.10 2.3.11	2.3.18	2.5.2	2.5.5	2.10.6	
2.3.33						Mechanical clearing not permitted.
Cape York F	Peninsula	1	1	1	1	1 Hot portrittou.
3.3.36	3.3.46	3.9.2	3.9.6	3.10.15	3.11.17	
3.3.37	3.5.24	3.9.5	3.9.7	3.11.15	0.11.17	
3.3.45	3.5.25	0.0.0	0.0.7	0.11.10		
Mitchell Gra						
4.3.9	4.3.10	4.5.8	4.7.4	4.9.12	4.9.18	
4.0.0	4.5.2	4.5.9	4.9.10	4.9.14	4.0.10	
Channel Co		4.0.0	4.0.10	7.0.17		
5.5.6						
Mulga Land	<u> </u>					
6.3.7	6.3.24	6.5.18	6.6.2	6.7.7	6.7.17	
6.3.9	0.5.24	6.5.19	6.7.6	6.7.9	6.9.2	
Einasleigh U	Inlands	0.0.10	0.7.0	0.7.0	0.0.2	
9.3.5	9.5.4	9.7.1	9.12.4	9.12.24	9.12.29	
9.3.22	9.5.14	9.11.24	9.12.15	9.12.27	9.12.29	
Desert Upla		J.11.24	0.12.10	J. 12.21		
10.3.6	10.3.12	10.3.26	10.5.4	10.5.9	10.9.5	
10.3.9	10.5.12	10.3.27	10.5.5	10.5.12	10.9.5	
10.3.10		10.3.28	10.5.5	10.5.12		
Brigalow Be	elt	10.0.20	1	1	1	l
11.11.6	11.8.5	11.11.6	11.11.11	11.12.5		
	1	1	11.11.12	11.12.0		
South-east (	Queensland		11.11.12			
12.11.15						
	ional ecosyst	ems	1		1	
			e tree density r	nust he at leas	st 300 trees no	er hectare after clearing.
Bioregion	on rates. Nota	med minatary	c tree deficity i	nuot be at leat	<u> </u>	Clearing restrictions
North West	Highlands					10001000113
1.3.4	1.5.2					
Gulf Plains	1.0.2	1	1		1	<u> </u>
2.3.5	2.3.27	2.5.10	2.7.4	2.9.5	2.10.4	
2.3.7	2.3.27	2.5.10	2.7.5	2.9.6	2.10.4	
2.3.19	2.3.36	2.5.12	2.7.3	2.10.1	2.11.1	
2.3.22	2.5.9	2.5.14	2.9.4	2.10.1	2.12.1	
		1	1		1	L

2.3.23 2.3.15	2.3.20	2.5.15 2.3.25	2.3.29	2.3.31	2.3.34	Mechanical
2.3.17	2.3.24	2.3.28	2.3.29	2.3.31	2.3.34	clearing not permitted.
Cape York Pe	ninsula	l	I		<b>.</b>	11
3.3.16	3.3.29	3.5.23	3.9.4	3.11.12	3.12.10	
3.3.17	3.3.30	3.7.3	3.11.7	3.11.13	3.12.11	
3.3.18	3.5.5	3.8.3	3.11.8	3.11.14	3.12.12	
3.3.19	3.5.6		3.11.9	3.11.16	3.12.18	
3.3.28	3.5.22					
Mitchell Grass		1	_			
4.3.8	4.5.4	4.5.6	4.9.6	4.9.11	4.9.16	
Channel Coun	•	1	_			
5.5.1	5.5.3	5.6.2.	5.6.3	5.6.4	5.7.7	
5.5.2	5.5.4					
Mulga Lands		1	<b>T</b>			
6.3.5	6.5.1	6.5.6	6.5.10	6.5.15	6.7.10	
6.3.16	6.5.2	6.5.7	6.5.11	6.5.16	6.7.11	
6.3.18	6.5.3	6.5.8	6.5.13	6.5.17	6.7.12	
6.3.21	6.5.5	6.5.9	6.5.14	6.6.1	6.7.13	
Wet Tropics			T			
7.12.28						
Central Queer		1	T	1	•	T
8.5.3	8.9.1	8.12.6	8.12.20	8.12.22	8.12.23	
8.5.5	8.11.1					
Einasleigh Upl		T				
9.3.2	9.5.7	9.8.9	9.11.13	9.12.1	9.12.21	
9.3.6	9.5.8	9.8.11	9.11.15	9.12.6	9.12.23	
9.3.8	9.5.9	9.10.7	9.11.17	9.12.7	9.12.26	
9.3.16	9.5.10	9.11.1	9.11.19	9.12.10	9.12.28	
9.3.19	9.7.3	9.11.2	9.11.21	9.12.11	9.12.32	
9.3.20	9.7.5	9.11.3	9.11.22	9.12.12	9.12.33	
9.3.21	9.8.1	9.11.5	9.11.23	9.12.13	9.12.39	
9.5.3	9.8.2	9.11.7	9.11.25	9.12.14	9.12.40	
9.5.6	9.8.4		9.11.26	9.12.16		
9.11.16	9.11.31	9.11.32	9.12.31			Mechanical
						clearing not
5	1					permitted.
Desert Upland	S		1		1	
10.3.11						Manhania
10.3.14						Mechanical
						clearing not
Drigolou Dalt			1			permitted.
Brigalow Belt	11 2 10	11 10	11 5 00	11 10 0	11 11 00	<u> </u>
11.3.4	11.3.19	11.4.2	11.5.20	11.10.6	11.11.20	
11.3.6	11.3.29	11.5.2	11.8.4	11.10.7	11.12.1	
11.3.7	11.3.30	11.5.3	11.9.2 11.9.7	11.10.12	11.12.2	
11.3.9 11.3.10	11.3.32 11.3.35	11.5.5 11.5.8	11.9.7	11.11.4 11.11.7	11.12.3 11.12.9	
11.3.10	11.3.35	11.5.8	11.10.1	11.11.7	11.12.9	
11.3.14	11.3.30	11.5.9		11.11.9	11.12.10	
	11.3.37	11.5.12		11.11.10	11.12.11	
South-east Qu		11.5.13	1	111.11.10		
		120107	12 12 4	1	1	
12.3.12 12.8.16	12.8.17	12.9-10.7	12.12.4 12.12.5			
	12.9–10.4		12.12.3			
New England	13.11.4	13.12.5	T	1		
13.11.1						

clearing. Bioregion						Clearing restrictions
<b>Gulf Plains</b>						
2.5.1	2.5.4					
2.3.21	2.5.16					Mechanical clearing not permitted.
Mulga Land						
6.3.22	6.7.1	6.7.2	6.7.14	6.7.15	6.7.16	
Wet Tropics	S					
7.11.21						
7.11.16	7.12.53	7.12.55				Mechanical clearing not permitted.
Central Que	eensland Coas	st				
8.12.9	8.12.12					
Einasleigh I	Uplands					
9.5.13						
9.3.3	9.3.15					Mechanical clearing not permitted.
Brigalow Be						
11.3.14 11.3.18	11.3.26 11.5.1 11.5.4	11.5.21 11.7.4 11.7.6	11.9.13 11.10.4 11.10.9	11.10.11 11.10.13 11.11.1	11.12.6 11.12.13	
11.7.7						Restricted to clearing of low shrubs only. Clearing of immature trees is not permitted.
	Queensland					
12.9-10.2	12.12.27					
	nd Tableland	1		T		
13.12.2						

Grassland regional ecosystems in which encroachment can be cleared					
3.3 56	4.3.13	4.9.9	6.7.17	10.3.7	11.4.11
3.3.60	4.3.20	5.7.9	8.3.12	10.3.8	11.8.11
3.3.61	4.9.7	5.7.10	9.8.5	11.3.20	11.9.12
3.12.32	4.9.8	6.3.13	9.12.42	11.3.31	

#### **Table 16.3.8**

Regional ecosystems in which fodder species are dominant and suitable for fodder harvesting by all harvesting practices						
4.5.1	5.5.2	5.7.14	6.5.8	6.5.14	6.7.9	6.7.12
4.5.2	5.5.4	6.3.21	6.5.9	6.5.15	6.7.10	
4.5.3	5.5.6	6.5.1	6.5.10	6.5.16	6.7.11	
4.5.4	5.6.4	6.5.6	6.5.11	6.5.18	6.7.12	
5.5.1	5.7.5	6.5.7	6.5.13	6.6.1	6.7.13	

Regional ecosystems in which fodder species are not dominant and harvesting is limited to selective harvesting only				
6.3.16	6.5.2	6.7.1	6.7.15	44.5.13

Regional ecosystems in which fodder species are not dominant and harvesting is limited to selective harvesting only					
6.3.18	6.5.3	6.7.6	6.7.16	11.7.2	
6.7.13	6.5.17	6.7.14	6.7.17	11.11.2	
11.5.1				·	

14510 1010110				
Minimum retention area and widths required for block harvesting				
Block harvesting area	Minimum width of retained vegetation			
Less than 0.5 hectares (70 metres by 70 metres)	75 metres			
0.5 hectares to 1 hectare (100 metres by 100	150 metres			
metres)				

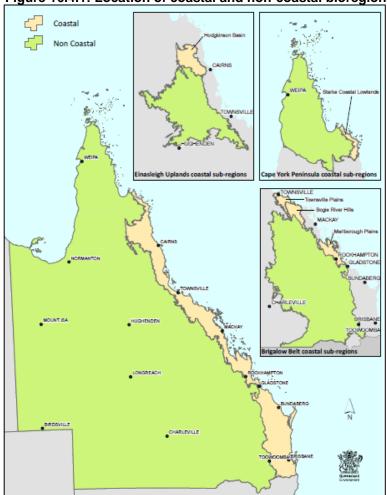
#### Table 16.3.11

Table 10.5.11					
Measurements of mature trees at 1.3 metres (diameter breast height)					
Clearing purpose	Bioregion/subregion	Measurement at 1.3 metres			
Encroachment	N/A	Trees with a single trunk – >20 centimetres Trees with several trunks – >30 centimetres			
Thinning and weed control	Coastal bioregions and subregions	Eucalyptus, Corymbia, Angophora, Lophostemon – >40 centimetres Genera other than Eucalyptus, Corymbia, Angophora and Lophostemon – >20 centimetres			
Thinning and weed control	Non-coastal bioregions and subregions	Eucalyptus, Corymbia, Angophora, Lophostemon – >30 centimetres Genera other than Eucalyptus, Corymbia, Angophora and Lophostemon – >20 centimetres			

. 45.0 . 5.5			
Range of size classes – trees			
Class Diameter at breast height (1.3 metres)			
1	<5 centimetres		
2	5 centimetres – 10 centimetres		
3	>10 centimetres – 20 centimetres		
4	>20 centimetres – 40 centimetres		

### **16.4 Figures**

Figure 16.4.1: Location of coastal and non-coastal bioregions and subregions



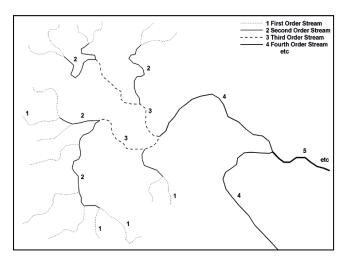


Figure 16.4.2: Diagrammatic view of stream ordering

When two streams of the same order join, the resulting stream becomes one **stream order** larger. If two streams of different orders join, the resultant **stream order** is that of the larger stream (note: for this diagram, streams are **watercourses** and **drainage features** shown on the **vegetation** management watercourse and drainage feature map).

### 16.5 Reference documents

Department of Environment and Heritage Protection 2014, Queensland Environmental Offsets Policy

Department of Environment and Heritage Protection 2015, BioCondition Benchmarks

Department of Environment and Heritage Protection 2016, Regional ecosystems database

Department of Infrastructure, Local Government and Planning 2017, State Planning Policy

Department of Natural Resources and Mines 2013, Guidelines for Necessary Environmental Clearing

Department of Natural Resources and Mines 2015, Guidelines for Applying to Clear for High-value or Irrigated High-value Agriculture

Department of Natural Resources and Mines 2018, State Development Assessment Provisions Guidance material: State code 16: Native vegetation clearing

Department of Science, Information Technology Innovation and the Arts 2014, Queensland Acid Sulfate Soil Technical Manual

Department of State Development, Infrastructure and Planning 2014, Significant Residual Impact Guideline

International Erosion Control Association (IECA) 2008, Best Practice Erosion and Sediment Control Document

### 16.6 Glossary of terms

**Accelerated soil erosion** means **soil erosion** that exceeds the natural level and that occurs as a direct result of human activity.

Adverse impacts of clearing include, but are not limited to, the following:

- 1. the loss of vegetation
- 2. the loss of biodiversity
- 3. land degradation
- 4. loss of connectivity
- 5. altered ecological processes; and
- 6. contributions to greenhouse gas emissions.

Aerial application means application by aircraft.

**Application area** means the area the subject of the development application that is proposed to be **cleared** of **vegetation**.

Better environmental outcome means an environmental outcome provided on land in exchange for an area to be developed which is a particular regulated area, or is subject to a notice requiring compliance (impact area), and is legally secured using a declared area (voluntary) before the commencement of works.

Biodiversity see the Vegetation Management Act 1999.

Note: **Biodiversity** means the variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part, and includes:

- 1. diversity within species and between species; and
- 2. diversity of ecosystems.

Block harvest area means the block or clump where block harvesting is undertaken.

Block harvesting means fodder harvesting in blocks or clump (block harvest areas) while retaining undisturbed areas of vegetation (block retention areas) on all sides of the block harvest area.

**Block retention area** means an undisturbed area of vegetation required to be retained on all sides of a **block** harvest area when undertaking **block harvesting**.

**Broadacre cropping** means the commercial cultivation of plants for oil; winter and summer cereals including wheat, barley, oats, triticale, sorghum, maize and millets; pulses including lupins, chickpeas, faba beans, field peas, mung beans, soybeans, lentils, guar, dolichos; sugar cane; rice; or cotton; or tea; or another commercial **crop** as approved by the chief executive of the VMA.

#### Category A area see the Vegetation Management Act 1999.

Note: A category A area is an area, other than a category B area, category C area, category R area or category X area, shown on the regulated vegetation management map as a category A area that:

- 1. is any of the following:
  - a. a declared area
  - b. an offset area
  - c. an exchange area; or
- 2. has been unlawfully cleared; or
- 3. is, or has been, subject to:
  - a. a restoration notice; or
  - b. an **enforcement notice** under the *Planning Act 2016* containing conditions about restoration of **vegetation**; or
- 4. has been cleared of native **vegetation** and in relation to the **clearing** a person has been found guilty by a court, whether or not a conviction has been recorded, of a **clearing** offence; or
- 5. the chief executive decides under section 20BA [of the VMA] is a category A area.

#### Category B area see the Vegetation Management Act 1999.

Note: A category B area is an area, other than a category A area, category C area, category R area or category X area, shown on the regulated vegetation management map as a category B area that:

- 1. contains remnant vegetation; or
- the chief executive [administering the VMA] decides to show on the regulated vegetation management map as a category B area; or
- 3. if section 20AN [of the VMA] does not apply to the area:
  - a. is a Land Act tenure to be converted under the Land Act 1994 to another form of tenure; and contains:
    - i. an endangered regional ecosystem; or
    - ii. an of concern regional ecosystem; or
    - iii. a least concern regional ecosystem.

#### Category X area see the Vegetation Management Act 1999.

Note: A category X area is an area, other than a category A area, category B area, category C area or category R area, shown on the regulated vegetation management map as a category X area. However, an area is not a category X area if the chief executive decides under section 20CA [of the VMA] that the area is not a category X area.

#### Clear, cleared or clearing of (vegetation) means:

- 1. to remove, cut down, ringbark, push over, poison or destroy in any way including by burning, flooding or draining; but
- 2. does not include destroying standing vegetation by stock, or lopping a tree.

Note: For the purpose of assessment of a material change of use or reconfiguring a lot application, any reference to **clearing** is taken to be "**clearing as a result of the material change of use**" or "**clearing as a result of the reconfiguring a lot**".

#### Clearing as a result of a material change of use means:

- 1. **clearing** that will result from the change in use, consisting of any of the following:
  - a. clearing to construct built infrastructure including buildings, stormwater management systems, water supply and sewerage systems – that are proposed as part of the material change of use application
  - b. **clearing** for roads, vehicle parking, vehicle and pedestrian access, utilities corridors, services, fences, **fire breaks** and **fire management lines**
  - clearing that may not be necessary for developing infrastructure but is associated with the use applied for
- 2. **clearing** that will become **exempt clearing work** if the development application is approved. This includes any of the following examples:
  - a. clearing for routine management and essential management purposes associated with the approved development including clearing to maintain proposed infrastructure, facilities, roads, access routes, utilities, services and fences, and clearing to maintain the safety of persons and property that will be associated with the development
  - b. **clearing** for necessary **fire breaks**, **fire management lines** and associated with the development. This will be assessed as follows:
    - i. all built infrastructure other than underground services, roads and fences will be assessed as requiring for **fire breaks** and safety buffers with a width of 20 metres or 1.5 times the height of the

- tallest adjacent tree to the infrastructure, whichever is the greater. The extent of **clearing** assessed will include any vegetation that may be required to be cleared for fire breaks distances and safety buffers on adjoining land
- ii. all proposed allotment boundaries will be assessed as requiring **clearing** for **fire management lines** with a width of 10 metres constructed on either side of the allotment boundary unless written
  evidence from the relevant Area Commander of the Queensland Fire and Emergency Service
  which confirms an alternative **fire management line** width is required or acceptable
- iii. in the case of evidence being presented which demonstrates constraints on **clearing** for **fire management lines** as being reasonably imposed in accordance with written evidence from the
  relevant Area Commander or equivalent officer of the Queensland Fire and Emergency Service,
  the development may be conditioned so that the full extent of **exempt clearing work** prescribed
  for **essential management** under schedule 21 of the Planning Regulation 2017 cannot be carried
  out by current or future landholders.

#### Clearing as a result of reconfiguring a lot means:

- 1. **clearing** that will result from reconfiguring a lot, consisting of any of the following:
  - a. **clearing** for boundary fence lines for each proposed allotment (whether or not the **clearing** is proposed as part of the application)
  - b. clearing to construct built infrastructure, including stormwater management systems, water supply and sewerage systems, roads, access routes or utilities corridors that are proposed as part of the reconfiguring a lot application or that will be required as a condition of approval by the assessment manager
  - c. **clearing** for excavation and filling, for example, where the lots are to be levelled
- clearing of vegetation that will become exempt clearing work if the development application is approved. This includes any of the following examples:
  - a. **clearing** for a single residence and reasonably associated buildings and structures for each allotment to be created as a result of the reconfiguring a lot, where no such dwelling house already exists on the proposed allotment
  - b. all lots will be assessed as including **clearing** of two hectares for the purpose stated in 2a, or for lots smaller than two hectares the whole area of the lot, unless the application demonstrates that a greater or smaller area will be required and achieved for example, building envelopes binding on title
  - c. clearing for routine management and essential management purposes associated with the approved development including clearing to maintain proposed infrastructure, facilities, roads, access routes, utilities, services and fences, and clearing to maintain the safety of persons and property that will be associated with the development
  - d. **clearing** for necessary **fire breaks**, **fire management lines** and safety buffers associated with the development. This will be assessed as follows:
    - i. all built infrastructure other than underground services, roads and fences will be assessed as requiring clearing for firebreaks and safety buffers with a width of 20 metres or 1.5 times the height of the tallest adjacent tree to the infrastructure, whichever is the greater. The extent of clearing assessed will include any vegetation that may be required to be cleared for fire breaks and safety buffers on adjoining land
    - ii. all proposed allotment boundaries will be assessed as requiring **clearing** for **fire management lines** with a width of 10 metres constructed on either side of the allotment boundary unless written
      evidence from the relevant Area Commander of the Queensland Fire and Emergency Service
      which confirms an alternative **fire management line** width is required or acceptable
    - iii. in the case of evidence being presented which demonstrates constraints on **clearing** for **fire**management lines as being reasonably imposed in accordance with written evidence from the
      relevant Area Commander of the Queensland Fire and Emergency Service, the development may
      be conditioned so that the full extent of **exempt clearing work** prescribed for **essential**management under schedule 21 of the Planning Regulation 2017 cannot be carried out by
      current or future landholders.

**Coastal bioregions and subregions** mean the following bioregions and subregions, as shown in figure 16.4.1:

- 1. Brigalow Belt Bioregion sub-regions Townsville Plains (sub-region 11.1), Bogie River Hills (sub-region 11.2), and Marlborough Plains (sub-region 11.14)
- 2. Central Queensland Coast Bioregion
- 3. Cape York Peninsula Bioregion sub-region Starke Coastal Lowlands (sub-region 3.2)
- 4. Einasleigh Uplands Bioregion sub-region Hodgkinson Basin

- 5. Wet Tropics Bioregion
- 6. South East Queensland Bioregion.

#### Contaminant see the Vegetation Management Act 1999.

Note: Contaminant includes a gas, liquid, solid or energy source, including radioactivity and electromagnetic radiation.

Contaminants removal means part 4 of necessary environmental clearing, defined as clearing of vegetation that is necessary to remove contaminants from land.

Coordinated project see the State Development and Public Works Organisation Act 1971.

Note: A **coordinated project** is a project declared to be a **coordinated project** under the *State Development and Public Works Organisation Act 1971*.

Crops see the Vegetation Management Act 1999.

Note: Crops means all or any of the following:

- 1. annual **horticulture**; or
- broadacre cropping; or
- perennial horticulture.

#### Declared area (voluntary) see section 19F of the Vegetation Management Act 1999.

Note: A **declared area (voluntary)** is an area declared under the VMA to be an area of high nature conservation value or an area vulnerable to **land degradation**, at the request of the owner of the land.

**Declared pests** means either a prohibited matter or restricted matter identified under schedules 1 or 2 of the *Biosecurity Act 2014*.

Note: A prohibited matter is a biosecurity matter that, for the time being, is established as prohibited matter. A restricted matter is a biosecurity matter that, for the time being, is established as restricted matter.

**Defining bank** means the bank which confines the seasonal flows but may be inundated by flooding from time to time. This can be either:

- 1. the bank or terrace that confines the water before the point of flooding; or
- 2. where there is no bank, the seasonal high water line which represents the point of flooding.

Dense regional ecosystems means regional ecosystems listed in table 16.3.5.

**Drainage feature** means a natural landscape feature, including a gully, drain, drainage depression or other erosion feature that:

- 1. is formed by the concentration of, or operates to confine or concentrate, overland flow water during and immediately after rainfall events
- 2. flows for only a short duration after a rainfall event, regardless of the frequency of flow events
- 3. commonly, does not have enough continuing flow to create a riverine environment
- 4. is shown on the vegetation management watercourse and drainage feature map:
  - a. at a scale of 1:25 000 on the **vegetation management watercourse and drainage feature map** for the local government areas of Brisbane, Moreton Bay, Gold Coast, Sunshine Coast, Logan and Redlands, excluding applications to **clear vegetation** for **extractive industry**; or
  - b. on the **vegetation management and drainage feature watercourse map** for all other local governments and applications to **clear vegetation** for **extractive industries**.

#### Ecological processes means processes including, but not limited to, the following:

- 1. hydrological processes; or
- 2. soil development; or
- 3. nutrient cycling; or
- 4. chemical processes including storage of nutrients; or
- 5. decomposition and cycling of organic matter; or
- 6. pollination and seed production; or
- 7. seed dispersal: or
- 8. predator-prey relationships; or
- 9. germination and recruitment of species; or
- 10. the carbon cycle and stability of atmospheric carbon; or
- 11. habitats for flora and fauna (such as particular **regional ecosystems**, logs, rocks, debris, leaf litter, nectar, hollow bearing trees, food and shelter).

#### Eligible owner see the Vegetation Management Act 1999, section 22DAC.

Note: Eligible owner means an owner of land who:

- 1. is authorised under the Water Act 2000, section 20 to take overland flow water or sub artesian water for any purpose; or
- 2. holds a water entitlement for the taking of water under the Water Act 2000; or
- 3. holds an existing authority for the taking of water under the Water Act 2000, section 1089; or
- 4. was, when the application was made, eligible to participate in a process for a water entitlement, or
- 5. is a customer of a water service provider under the Water Supply (Safety and Reliability) Act 2008; or
- 6. holds an approval under the Waste Reduction and Recycling Act 2011, chapter 8 and the resource to which the approval relates is water; or
- 7. has applied for a water licence under the Water Act 2000, section 206; or
- 8. holds, or has a right to be supplied water under, an environmental authority under the Environmental Protection Act 1994; or
- 9. is authorised to take water under a law of another State or Territory in compliance with an authorisation declared under the *Water Act 2000*, section 808(1)(b).

**Encroachment** means a woody species that has invaded an area of a grassland **regional ecosystem** to an extent the area is no longer consistent with the description of the **regional ecosystem** and the woody species is visible on aerial photographs or satellite imagery taken in the year 1950 to present.

#### Endangered regional ecosystem see the Vegetation Management Act 1999.

Note: Endangered regional ecosystem means a regional ecosystem declared to be an endangered regional ecosystem under the VMA.

**Enforcement notice** means a notice under the *Planning Act 2016* issued for a **clearing** offence or a notice under the *Planning Act 2016* containing conditions about restoration of **vegetation**.

Environmental clearing management plan means a plan that outlines management actions that will be undertaken in an area cleared for necessary environmental clearing to rehabilitate the area over time to ensure endangered regional ecosystems, of concern regional ecosystems, least concern regional ecosystems, essential habitat, connectivity is maintained, wetlands and watercourses are protected, and clearing does not result in land degradation.

Note: Refer to the Guidelines for **necessary environmental clearing** to assist with developing the **environmental clearing** management plan.

#### Environmental offset agreement see the Environmental Offsets Act 2014.

Note: Environmental offset agreements may also be described as an 'agreed delivery arrangement' or 'delivery agreement'.

#### Essential habitat see the Vegetation Management Act 1999, section 20AC.

Note: Essential habitat is shown on the essential habitat map.

Essential habitat for protected wildlife is a category A area, category B area or category C area shown on the regulated vegetation management map:

- that has at least three essential habitat factors for the protected wildlife that must include any essential habitat factors that are stated as mandatory for the protected wildlife in the essential habitat database; or
- 2. in which the **protected wildlife**, at any stage of its life cycle, is located.

#### Essential habitat database see the Vegetation Management Act 1999.

Note: An essential habitat database means a database, listing essential habitat factors for protected wildlife, certified by the chief executive [administering the VMA] as an essential habitat database.

#### Essential habitat factor see the Vegetation Management Act 1999.

Note: **Essential habitat factor**, for **protected wildlife**, is a component of the wildlife's habitat, including for example, a landform, pollinator, **regional ecosystem**, soil and water, that is necessary or desirable for the wildlife at any stage of its lifecycle.

#### Essential habitat map see the Vegetation Management Act 1999, section 20AC.

Note: The **essential habitat map** is a map certified by the chief executive [administering the **VMA**] as the **essential habitat map** for the State and showing, for the State, areas the chief executive reasonably believes are areas of **essential habitat** for **protected wildlife.** 

#### **Essential management** see schedule 24 of the Planning Regulation 2017.

Note: Essential management means clearing native vegetation:

- for establishing or maintaining a necessary firebreak to protect infrastructure other than a fence, road or vehicular track, if the
  maximum width of the firebreak is equivalent to 1.5 times the height of the tallest vegetation adjacent to the infrastructure, or 20
  metres, whichever is the greater; or
- 2. for establishing a necessary **fire management line** if the maximum width of the **clearing** for the **fire management line** is 10 metres; or
- necessary to remove or reduce the imminent risk that the vegetation poses of serious personal injury or damage to the infrastructure; or
- 4. by fire under the Fire and Emergency Services Act 1990 to reduce hazardous fuel load; or

- 5. necessary to maintain infrastructure including any core airport infrastructure, buildings, fences, helipads, roads, stockyards, vehicular tracks, watering facilities and constructed drains other than contour banks, other than to source construction material; or
- 6. for maintaining a garden or orchard, other than **clearing** predominant canopy trees to maintain underplantings established within **remnant vegetation**; or
- 7. on land subject to a lease issued under the *Land Act 1994* for agriculture or grazing purposes to source construction timber to repair existing infrastructure on the land, if:
  - a. the infrastructure is in need of immediate repair
  - b. the clearing does not cause land degradation as defined under the VMA
  - c. restoration of a similar type, and to the extent of the removed trees, is ensured; or
- 8. by the owner on freehold land to source construction timber to maintain infrastructure on any land of the owners, if:
  - a. the clearing does not cause land degradation as defined under the VMA
  - b. restoration of a similar type, and to the extent of the removed trees, is ensured.

#### Exchange area see the Vegetation Management Act 1999.

Note: **Exchange area** means an area of **vegetation** that must be protected in the way provided under a self-assessable **vegetation** clearing code in exchange for clearing high value regrowth **vegetation**.

#### **Exempt clearing work** see the Planning Regulation 2017.

**Note: Exempt clearing work** means operational work that is the **clearing** of native vegetation as **exempt clearing work** or for particular land as prescribed in schedule 21 of the Planning Regulation 2017, or that, under the *Vegetation Management Act 1999*, section 74, is not affected by that Act.

#### **Extractive industry** see the Vegetation Management Act 1999.

Note: Extractive industry means one or more of the following:

- 1. dredging material from the bed of any waters
- 2. extracting, from a pit or quarry, rock, sand, clay, gravel, loam or other material
- 3. screening, washing, grinding, milling, sizing or separating material extracted from a pit or quarry; and
- 4. includes carrying out work that is the natural and ordinary consequence of carrying out the work mentioned above.

**Firebreak** means an area that has been cleared and maintained in a low fuel state to either stop or steady wildfire, or back burn against.

**Fire management line** means a pathway, track or road, including existing property tracks, or fence line **clearings**, which can be used to access water for fire-fighting, divide the property into sub-units to allow a fuel reduction burning program to be carried out, and/or divide the property into sub-units to allow for back burning in the event of a wildfire.

#### Fodder harvesting see the Vegetation Management Act 1999.

Note: Fodder harvesting is the clearing of vegetation predominantly consisting of fodder species:

- necessary to provide fodder for stock
- 2. carried out in a way that:
  - a. conserves the vegetation in perpetuity
  - b. conserves the regional ecosystem in which the vegetation is situated
  - c. results in the woody biomass of the cleared vegetation remaining where it is cleared.

#### Fodder species means any of the following species:

- 1. Mulga (Acacia aneura)
- 2. Umbrella or bastard mulga (Acacia brachystachya formerly Acacia cibaria)
- 3. Ironwood (Acacia excelsa)
- 4. Myall (Acacia pendula)
- 5. Bastard mulga (Acacia stowardii)
- 6. Red Ash (Alphitonia excelsa)
- 7. Leapardwood (Flindersia maculosa)
- 8. Wilga (Geijera parviflora).

**Ground cover** means plant matter, either dead or alive, woody or non-woody, that covers the surface of the ground (either attached or detached), e.g. grasses, shrubs, tree and grass leaf litter, twigs, logs, branches etc.

Groundwater means water occurring below the surface of the ground.

**Grove** means an area of woody **vegetation** identified by either of the following:

- 1. five or more trees that are either mature trees or habitat trees within an area of 0.25 hectares; or
- 2. a patch of woody **vegetation** that is present in aerial photography or satellite imagery that is more than 20 years of age.

**Gully erosion** means the removal of soil by water creating large incised channels more than 30 centimetres in depth.

#### Habitat trees include:

- 1. living trees with one or more visible hollows of 10 cm or more in diameter and positioned at least two metres above the base of the tree. Habitat trees are used, or potentially used, by hollow-dwelling fauna; or
- 2. trees that contain an active bird's nest or the nest of a raptor or other bird that uses the same nest each year.

#### High value agriculture clearing see the Vegetation Management Act 1999.

Note: **High value agriculture clearing** means **clearing** carried out to establish, cultivate and harvest **crops**, other than **clearing** for grazing activities or plantation forestry. For further information refer to Guidelines for applying to clear for high-value or irrigated high-value agriculture, Department of Natural Resources and Mines, 2015.

**Immature trees** means a tree or shrub (other than a **mature tree** or **habitat tree**) that is two metres or more in height.

#### Irrigated high value agriculture clearing see the Vegetation Management Act 1999.

Note: Irrigated high value agriculture clearing means clearing carried out to establish, cultivate and harvest crops, or pasture, other than clearing for plantation forestry, that will be supplied with water by artificial means. For further information refer to Guidelines for applying to clear for high-value or irrigated high-value agriculture, Department of Natural Resources and Mines, 2015.

#### Land Act notice see the Vegetation Management Act 1999, section 20BA(b).

Note: A **Land Act notice** is a notice issued by the chief executive [administering the VMA] for **clearing** in contravention of a tree **clearing** provision under the *Land Act 1994* as in force before the commencement of the *Vegetation Management and Other Legislation Amendment Act 2004*, section 3.

#### Land degradation see the Vegetation Management Act 1999.

Note: Land degradation includes any of the following:

- 1. soil erosion; or
- rising water tables; or
- 3. the expression of salinity; or
- 4. mass movement by gravity of soil or rock; or
- stream bank instability; or
- 6. a process that results in declining water quality.

**Land restoration** means part 1 of **necessary environmental clearing**, defined as **clearing** of **vegetation** that is necessary to restore the ecological and environmental condition of land.

**Land zone 1** means quaternary estuarine and marine deposits subject to periodic inundation by saline or brackish marine waters. This includes mangroves, saltpans, off-shore tidal flats and tidal beaches.

Land zone 2 means quaternary coastal dunes and beach ridges. This includes degraded dunes, sand plains and swales, lakes and swamps enclosed by dunes, as well as coral and sand cays.

**Land zone 3** means quaternary alluvial systems, including floodplains, alluvial plains, alluvial fans, terraces, levees, swamps, channels, closed depressions and fine textured palaeo-estuarine deposits. This also includes estuarine plains currently under fresh water influence, inland lakes and associated dune systems (lunettes).

#### Least concern regional ecosystem see the Vegetation Management Act 1999.

Note: Least concern regional ecosystem means a regional ecosystem declared to be a least concern regional ecosystem under the VMA.

#### Legally secured offset area see the Environmental Offsets Act 2014.

Note: An area of land is a legally secured offset area if:

- 1. the area is:
  - a. an environmental **offset** protection area; or
  - b. an area declared as an area of high nature conservation value under section 19F of the Vegetation Management Act
  - c. another area prescribed under a regulation; and
- 2. under the *Environmental Offsets Act 2014* or another Act, the area is subject to a delivery or management plan or agreement (however described in this Act or the other Act) to achieve a conservation outcome for a **prescribed environmental matter**.

Low shrub means any live woody tree, shrub or ground cover less than two meters high.

#### Maintain the current extent means to:

- 1. avoid clearing the regional ecosystems; or
- 2. if subparagraph 1 is not reasonably practicable, ensure the structure and function of the **regional ecosystem** is maintained (minimise the **clearing**); or
- 3. if subparagraphs 1 or 2 are not reasonably practicable, provide an offset.

Mass movement is a landslip, earthflow, landslide, rock avalanche or soil creep.

Matters of state environmental significance see the Environmental Offsets Regulation 2014, schedule 2. Note: Matters of state environmental significance are prescribed environmental matters under the Environmental Offsets Regulation 2014 that require an offset when a prescribed activity will have a significant residual impact on the matter. A matter of state environmental significance is any of the following matters:

- 1. regional ecosystems under the Vegetation Management Act 1999 that:
  - a. are endangered regional ecosystems; or
  - b. are of concern regional ecosystems; or
  - c. intersect with a wetland shown on the vegetation management wetlands map; or
  - d. contain areas of **essential habitat** shown on the **essential habitat map** for an animal that is endangered wildlife or vulnerable wildlife or a plant that is endangered wildlife or vulnerable wildlife; or
  - e. are located within the defined distances stated in the Environmental Offsets Policy 2014 from the defining banks of a relevant watercourse or drainage feature as shown on the vegetation management watercourse and drainage feature map; or
  - f. are areas of land determined to be required for ecosystem functioning ('connectivity areas'); or
- 2. **wetlands** in a **wetland** protection area or **wetlands** of high ecological significance shown on the Map of referable **wetlands** under the Environmental Protection Regulation 2008; or
- 3. **wetlands** and **watercourses** in high ecological value waters as defined in the Environmental Protection (Water) Policy 2009, schedule 2; or
- 4. designated precincts in strategic environmental areas under the Regional Planning Interests Regulation 2014; or
- threatened wildlife under the Nature Conservation Act 1992 and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006; or
- 6. protected areas under the Nature Conservation Act 1992, excluding coordinated conservation areas; or
- 7. highly protected zones of state marine parks under the Marine Parks Act 2004; or
- 8. fish habitat areas under the Fisheries Act 1994; or
- 9. waterways that provide for fish passage under the *Fisheries Act 1994* if the construction, installation or modification of waterway barrier works carried will limit the passage of fish along the waterway; or
- 10. marine plants under the Fisheries Act 1994; or
- 11. legally secured offset areas.

**Mature trees** means trees with a diameter at 1.3 metres (diameter breast height) as specified in table 16.3.11.

**Mechanical clearing** means the **clearing** of **vegetation** using machinery which disturbs the soil surface or uproots woody **vegetation**.

**Natural channel diversion** means part 2 of **necessary environmental clearing**, defined as **clearing** that is necessary to divert existing natural channels in a way that replicates the existing form of the natural channels.

**Natural disaster preparation** means part 3 of **necessary environmental clearing**, defined as **clearing** that is necessary to prepare for the likelihood of a natural disaster.

Necessary environmental clearing see the Vegetation Management Act 1999.

Note: Necessary environmental clearing means clearing of vegetation that is necessary to:

- restore the ecological and environmental condition of land (example stabilising banks of watercourses and drainage features, works to rehabilitate eroded areas, works to prevent erosion of land or for ecological fire management); or
- 2. divert existing natural channels in a way that replicates the existing form of the natural channels; or
- 3. prepare for the likelihood of a natural disaster (example removal of silt to mitigate flooding); or
- 4. remove **contaminants** from land.

**Non-coastal bioregions and subregions** mean the following bioregions and subregions, as shown in figure 16.4.1:

- 1. Brigalow Belt Bioregion sub-regions not listed under coastal bioregions and subregions
- 2. New England Tableland Bioregion
- 3. Northwest Highlands Bioregion
- 4. Gulf Plains Bioregion
- 5. Cape York Peninsula Bioregion subregions not listed under coastal bioregions and subregions
- 6. Mitchell Grass Downs Bioregion
- 7. Channel Country Bioregion

- 8. Mulga Lands Bioregion
- Einasleigh Uplands Bioregion subregions not listed under coastal bioregions and subregions
- 10. Desert Uplands Bioregion.

#### Notice requiring compliance mean any of the following notices:

- 1. a restoration notice: or
- 2. a stop work notice; or
- 3. a Land Act notice; or
- 4. a trespass notice if the trespass related act under the *Land Act 1994* for the notice is the **clearing** of **vegetation** on the relevant land; or
- 5. an enforcement notice under the Planning Act 2016 issued for a vegetation clearing offence; or
- 6. a compliance notice containing conditions about the restoration of **vegetation**.

#### Of concern regional ecosystem see the Vegetation Management Act 1999.

Note: Of concern regional ecosystem means a regional ecosystem declared to be an of concern regional ecosystem under the VMA.

#### Offset means environmental offset under the Environmental Offsets Act 2014.

Note: Environmental **offset** means an activity undertaken to counterbalance a **significant residual impact** of a prescribed activity on a **prescribed environmental matter**, delivered in accordance with the Environmental offsets Framework. The **prescribed environmental matters** assessed under the State Development Assessment Provisions are **matters of state environmental significance**.

#### Offset area see the Vegetation Management Act 1999.

Note: Offset area means a legally secured offset area under the Environmental Offset Act 2014.

Other development associated with development approvals under the *Integrated Planning Act 1997* means clearing that is a natural and ordinary consequence of other assessable development for which a development approval was given under the repealed *Integrated Planning Act 1997*, or a development application was made under that Act, before 16 May 2003.

#### Particular regulated areas means any of the following areas:

- 1. an exchange area; or
- 2. an unlawfully cleared area; or
- 3. a **declared area (voluntary)** declared for purposes other than to legally secure an **offset area** under the *Environmental Offsets Act 2014*; or
- 4. an area on a **PMAV** shown to be **category A area** where the chief executive [administering the VMA] reasonably believes that a **vegetation clearing** offence is being, or has been, committed in relation to the area.

#### Prescribed environmental matters see the Environmental Offsets Act 2014.

Note: A **prescribed environmental matter** is any species, ecosystem or other similar matter protected under Queensland legislation for which an **offset** may be provided. A **prescribed environmental matter** may be a matter of national, state or environmental significance, however, assessment criteria in the State Development Assessment Provisions only relate to **matters** of **state environmental significance**. Each of the **prescribed environmental matters** is listed under the Environmental Offsets Regulation 2014.

**Prescribed regional ecosystems and restrictions** means a regional ecosystem or restriction prescribed in table 16.3.6 of this code for thinning.

## **Property map of assessable vegetation (PMAV)** see *Vegetation Management Act 1999*. Note:

- a property map of assessable vegetation (PMAV) is a map certified by the chief executive [administering the VMA] as a PMAV for an area and showing the vegetation category area for the area
- 2. the map may also show for the area the location of the boundaries of, and the **regional ecosystem** number for, each **regional ecosystem** in the area.

#### **Protected wildlife** see the Vegetation Management Act 1999.

Note: Protected wildlife means native wildlife prescribed under the Nature Conservation Act 1992 as:

- 1. extinct in the wild wildlife; or
- 2. endangered wildlife; or
- 3. vulnerable wildlife; or
- 4. near threatened wildlife; or
- 5. least concern wildlife.

Public safety means clearing to ensure public safety.

Range of sizes means retaining a range of all size classes as outlined in table 16.3.12.

#### Regional ecosystem see the Vegetation Management Act 1999.

Note: **Regional ecosystem** means a **vegetation** community in a bioregion that is consistently associated with a particular combination of geology, landform and soil.

#### Regulated vegetation management map see the Vegetation Management Act 1999, section 20A.

Note: The **regulated vegetation management map** is the map certified by the chief executive [administering the VMA] as the **regulated vegetation management map** for a part of the State and showing the **vegetation** category areas for the part.

Rehabilitate means undertaking management actions in accordance with an **environmental clearing** management plan to ensure:

- 1. **clearing vegetation** associated with a **wetland** protects:
  - a. water quality by filtering sediments, nutrients and pollutants
  - b. aquatic habitat
  - c. terrestrial habitat
- clearing vegetation associated with a watercourse or drainage feature protects:
  - a. bank stability by protecting against bank erosion
  - b. water quality by filtering sediments, nutrients and pollutants
  - c. aquatic habitat
  - d. terrestrial habitat
- 3. connectivity areas are maintained
- 4. essential habitat is maintained
- endangered regional ecosystems, of concern regional ecosystems and least concern regional ecosystems are maintained.

Note: Refer to the Guidelines for **necessary environmental clearing**, Department of Natural Resources and Mines, 2013 to assist with developing relevant management actions to ensure the **application area** is appropriately **rehabilitated**.

#### Relevant infrastructure activities see the Vegetation Management Act 1999.

Note: Relevant infrastructure activities means:

- 1. establishing and maintaining a necessary fence, firebreak, road, or vehicular track; or
- 2. constructing and maintaining necessary built infrastructure.

#### Remnant vegetation see the Vegetation Management Act 1999.

Note: Remnant vegetation means vegetation:

- 1. that is:
  - a. an endangered regional ecosystem; or
  - b. an of concern regional ecosystem; or
  - c. a least concern regional ecosystem
- 2. forming the predominant canopy of the **vegetation**:
  - a. covering more than 50 per cent of the undisturbed predominant canopy
  - b. averaging more than 70 per cent of the vegetation's undisturbed height
  - c. composed of species characteristic of the **vegetation's** undisturbed predominant canopy.

#### Restoration notice see the Vegetation Management Act 1999, section 54B.

Note: A **restoration notice** means a notice given to a person by an official requiring the person to rectify the matter if the official reasonably believes the person has committed a **vegetation clearing** offence and the matter can be rectified.

**Retained tree** means any native tree that has a diameter at 1.3 metres above ground level which is 20 centimetres or more. For multi-stemmed trees, add the diameters of the two largest stems.

**Retained vegetation** means an area of a fodder **regional ecosystem** that has an average canopy height of **fodder species** that is more than four metres.

Rill erosion means the removal of soil by runoff water to create small channels up to 30 centimetres deep.

**Root-absorbed broad spectrum herbicide** means a herbicide that is taken up through the root systems of plants, such as those with hexazinone and tebuthiuron as active ingredients.

#### Routine management see schedule 24 of the Planning Regulation 2017.

Note: Routine management means the clearing of native vegetation:

- 1. to establish a necessary fence, road or vehicular track if the maximum width of clearing for the fence, road or track is 10 metres; or
- 2. to construct necessary build infrastructure, including core airport infrastructure, other than contour banks, fences, roads or vehicular tracks, if:

- a. the **clearing** is not to source construction timber
- b. the total extent of **clearing** is less than two hectares
- c. the total extent of the infrastructure is less than two hectares; or
- 3. by the owner on freehold land to source construction timber for establishing necessary infrastructure on any land of the owner, if:
  - a. the **clearing** does not cause **land degradation** as defined under the VMA
  - b. restoration of a similar type, and to the extent of the removed trees, is ensured; or
- 4. by the lessee of land subject to a lease issued under the *Land Act 1994* for agriculture or grazing purposes to source construction timber, other than commercial timber, for establishing necessary infrastructure on the land if:
  - a. the clearing does not cause land degradation as defined under the VMA
  - b. restoration of a similar type, and to the extent of the removed trees, is ensured.

**Salinisation** means the process of salts accumulating in soils or waters.

Salinity means waterlogging or the salinisation of groundwater, surface water or soil.

Salinity expression area means an area containing more than one of the following salinity indicators:

- 1. plant species tolerant of saline conditions, shallow water tables or poor drainage (waterlogging);
- 2. wet areas in lower parts of the landscape or bare soil (soil **scalding**);
- 3. dieback of larger trees in low, wetter parts of the landscape (outside drought conditions or the effects of fire);
- 4. salt accumulations on the surface (often white and powdery, sometimes crystalline); or
- 5. areas of shallow groundwater.

#### Note:

- 1. For example—Melaleuca spp. (in particular Melaleuca bracteata and Melaleuca quinquenervia), Sporobolus virginicus (saltwater or marine couch), Salsola australis (soft roly-poly), Sclerolaena spp. (in particular prickly roly-poly), Cyperus spp. (sedges), Juncus spp. (rushes), Atriplex spp. (saltbushes), Cynodon dactylon (common couch), Enchylaena tomentosa (ruby saltbush), Sesuvium portulacastrum (purslane), Tecticornia species (samphires), Phragmites spp.
- 2. A water table less than five metres from the surface would generally be consider as shallow for this purpose. One mechanism to identify this is from a nearby bore.

#### Scalding means:

- 1. a bare area formed when the surface soil is removed by wind or water erosion, exposing a more clayey subsoil which is relatively impermeable to water; or
- 2. where surface soil has been transformed into a hard-setting condition by exposure to raindrop impact or wind erosion.

**Seasonal high water line** means the zone which represents the usual peak seasonal flow level and can be identified by deposition, debris or characteristic **vegetation** zonation. If this is not obvious, project a horizontal line from the **seasonal high water line** on the opposite bank.

**Selective harvesting** involves felling individual fodder trees using a chainsaw, or selectively pushing individual fodder trees using a tractor or dozer. This practice should cause minimal damage to the surrounding **vegetation**.

**Sheet erosion** is the removal of a uniform layer of soil from the surface with generally no obvious channel created.

#### Significant residual impact see the Environmental Offsets Act 2014.

- Note: Significant residual impact is an impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that:remains, or will or is likely to remain, (whether temporarily or permanently) despite on-site mitigation measures for the prescribed activity
- 2. is, or will or is likely to be, significant.

Guidance for determining if a prescribed activity will have a **significant residual impact** on a **matter of state environmental significance** is provided in the Significant Residual Impact Guideline, Department State Development, Infrastructure and Planning, 2014.

**Slope** means a measure of the upward or downward incline of the land surface over any 30 metre length in the **application area**.

**Soil erosion** means mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and any associated loss of chemical, physical or biological fertility – including, but not limited to water holding capacity, soil structure, organic matter, soil biology, and nutrients.

**Soil erosion and instability** means the occurrence of gully erosion greater than 30 centimetres in depth, landslips, a scarp, soil **scalding** or stream bank slumping.

**Stream order** means a numerical ordering classification of each stream segment according to its position within a catchment, as shown in figure 16.4.2. Streams are **watercourses** and **drainage features** shown on the **vegetation management watercourse** and **drainage feature map**.

Stop work notice see the Vegetation Management Act 1999, section 54A.

Note: A **stop work notice** means a notice given to a person by an official requiring the person to stop committing a **vegetation** offence if the official reasonably believes the person is committing a **vegetation clearing** offence.

Strip harvest area means a strip where strip harvesting is undertaken.

**Strip harvesting** means fodder harvesting in strips (**strip harvest areas**), while retaining undisturbed areas of **vegetation** (**strip retention areas**) on both sides of a **strip harvest area**.

**Strip retention area** means an undisturbed area of **vegetation** required to be retained on all sides of a **strip** harvest area when undertaking **strip harvesting**.

Tall immature tree means the tallest immature trees retained as 'surrogate' mature trees.

**Thicket** means thick or dense patches of **vegetation** such as vine-scrub, gidgee (Acacia cambagei) or brigalow (Acacia harpophylla) that naturally occur in sparse to mid-**dense regional ecosystems**. Note: **Thickets** are generally too small to be mapped as distinct vegetation communities, but may be visible on satellite or aerial imagery. The species composition within vine-scrub **thickets** may differ from the surrounding vegetation.

**Thinning** means the selective **clearing** of **vegetation** to restore a **regional ecosystem** to the floristic composition and range of densities typical of that **regional ecosystem in** that area.

**Threatening processes** are natural or human induced process that adversely affect or may adversely affect regulated **vegetation**, populations, ecological communities or species. A threatening process threatens or may threaten the survival, abundance or evolutionary development of a native species or ecological community and may include but are not limited to:

- 1. fragmentation
- 2. land clearing
- 3. climate change
- 4. weather events
- 5. weeds and pests (animal and plant) infestations
- 6. fire
- 7. disease
- 8. land degradation
- predation.

#### Unlawfully cleared see the Vegetation Management Act 1999.

Note: means cleared of vegetation by a person in contravention of:

- 1. a **vegetation clearing** provision, if the person:
  - a. has not contested an infringement notice given for the contravention; or
  - b. has been convicted of the contravention, whether or not the conviction is recorded; or
- a tree clearing provision under the Land Act 1994, as in force before the commencement of the Vegetation Management and Other Legislation Amendment Act 2004, section 3.

#### Vegetation see the Vegetation Management Act 1999.

Note: For the purpose of this code, **vegetation** is limited to **vegetation** where it is identified as assessable under the Planning Regulation 2017.

**Vegetation management requirements** means any conditions, restrictions, management requirements or outcomes identified in a **particular regulated area** which must be undertaken or complied with to achieve compliance with the **particular regulated area**.

**Vegetation management watercourse and drainage feature map** see the *Vegetation Management Act* 1999.

Note: The **vegetation management watercourse and drainage feature map** is the map certified by the chief executive [administering the VMA] as the **vegetation management watercourse and drainage feature map** showing particular **watercourses** and **drainage features** for the State. The map consists of the following documents:

- 1. the document called Vegetation management watercourse and drainage feature map (1:25 000)
- 2. the document called Vegetation management watercourse and drainage feature map (1:100 000 and 1:250 000).

Vegetation management wetlands map see the Vegetation Management Act 1999.

Note: The **vegetation management wetlands map** is the map certified by the chief executive [administering the VMA] as the **vegetation management wetlands map** showing particular **wetlands** for the state.

**Watercourse** means a **watercourse** as defined under the *Vegetation Management Act 1999*, other than an artificial channel, that is shown:

- at a scale of 1:25 000 on the vegetation management watercourse and drainage feature map for the local government areas of Brisbane, Moreton Bay, Gold Coast, Sunshine Coast, Logan and Redlands, excluding applications to clear vegetation for extractive industry; or
- 2. on the **vegetation management watercourse and drainage feature map** for all other local governments and applications to **clear vegetation** for **extractive industries**.

Waterlogging means to soak or saturate with water.

**Weed cover** means the estimated percentage of the area that is covered by weeds, measured over a 30 metre by 30 metre (0.09 hectare) area.

**Wetland** means an area of land that supports plants or is associated with plants that are adapted to and dependent on living in wet conditions for at least part of their life cycle, and are shown on the **vegetation management wetlands map**.

Wind erosion means the movement of soil by wind.

### 16.7 Abbreviations

PMAV - Property map of assessable vegetation

VMA - Vegetation Management Act 1999

**REDD** – Regional Ecosystem Description Database

## State code 17: Aquaculture

## 17.1 Purpose statement

The purpose of this code is to ensure **aquaculture** industry development and practices are ecologically sustainable. The code ensures that development:

- 1. appropriately carries out the use of fisheries and **aquaculture fisheries resources** (proposed broodstock and culture species)
- 2. meets standards in the prevention, control and eradication of disease in fish
- 3. suitably contains aquaculture fisheries resources to prevent escape and release
- 4. has the ability to prevent the entry of fisheries resources into the development area
- 5. has the ability to meet food and other relevant supply chain standards
- meets the relevant standards for associated features (e.g. location of ponds, use of aquaculture furniture)
- 7. manages any proposed disturbance or adverse impact to fisheries resources
- 8. manages any displacement of commercial, recreational or indigenous fishing access
- 9. monitors performance and operational procedures where required
- 10. rehabilitates the development area if the aquaculture use is abandoned or ends.

Note: Guidance on addressing code requirements is available in the State Development Assessment Provisions Guidance Material: State code 17: Aquaculture, Department of Agriculture and Fisheries, 2017.

## 17.2 Performance outcomes and acceptable outcomes

Development that is a material change of use for **aquaculture** should demonstrate compliance with the relevant provisions of table 17.2.2. For further details of the specific performance outcomes to be addressed, please refer to table 17.2.1.

Table 17.2.1: Development type and relevant provisions of the code

Types of aquaculture	Relevant provisions of code
Location	Table 17.2.2 – PO1 – PO2
Development and construction of an aquaculture	Table 17.2.2 – PO3 – PO9
facility	
Land-based aquaculture	Table 17.2.2 – PO10 – PO15
Tidal aquaculture	Table 17.2.2 – PO16 – PO22
Aquaculture of barramundi for inland catchments	Table 17.2.2 – PO23
Exotic fish	Table 17.2.2 – PO24 – PO25
Aquaculture of rare, threatened and endangered species recognised in commonwealth and state legislation	Table 17.2.2 – PO26
For <b>aquaculture</b> in the Great Sandy Strait Marine Park	Table 17.2.2 – PO27

Table 17.2.2: Material change of use

Performance outcomes	Acceptable outcomes
Location	
PO1 The aquaculture development is suitably	For development within a marine park
located for the type and scale of aquaculture	
activity proposed.	AO1.1 Aquaculture development in a marine park
	is located in a zone where <b>aquaculture</b> is supported
Note: Aquaculture Development Areas (ADAs) are to be	as a use or entry with permission.
developed in accordance with the Queensland Aquaculture Policy	
	Note: Refer to the relevant marine park zoning plan:
Statement 2016. As ADAs are designated and recognised linkages to information about them will be provided here.	Note: Refer to the relevant <b>marine park</b> zoning plan:  1. Marine parks (Great Barrier Reef Coast) zoning plan 2004

Performance outcomes	Acceptable outcomes
1 criormance outcomes	Marine parks (Great Sandy) zoning plan 2006
	Marine parks (Moreton Bay Marine) zoning plan 2008.
	For any other development no acceptable outcome
To assist in demonstrating sound site selection, an applicant	is prescribed.
should provide details of how issues have been addressed.	
PO2 Aquaculture development is located to avoid	No acceptable outcome is prescribed.
or minimise impacts on the natural environment.	
Development and construction of an aquaculture	development
PO3 Aquaculture development does not adversely	AO3.1 The development does not alter existing
impact on community access to fisheries	infrastructure or existing community access
resources and fish habitats including recreational	arrangements to fisheries resources and fish
and indigenous fishing access.	habitats.
Note: In some cases, compensation for impact on fisheries access, operations and/or productivity may be necessary. The Guideline on fisheries adjustment provides advice for proponents	
on relevant fisheries adjustment processes and is available by	
request from the Department of Agriculture and Fisheries.	No constable extreme to constitut
<b>PO4 Aquaculture</b> development does not adversely impact on commercial <b>fishing</b> access and linkages between a commercial <b>fishery</b> and infrastructure, services and facilities	No acceptable outcome is prescribed.
Note: In some cases, compensation for impact on fisheries access may be necessary. The Guideline on fisheries adjustment provides advice for proponents on relevant fisheries adjustment processes and is available by request from the Department of Agriculture and Fisheries.	
PO5 Aquaculture development does not increase	No acceptable outcome is prescribed.
the risk of mortality, <b>disease</b> or injury, or	
compromise the health and productivity of, <b>fisheries</b>	
resources by:	
maintaining suitable habitat conditions	
2. controlling the use of toxic substances	
3. avoiding the trapping or stranding of <b>fish</b> .	
PO6 Aquaculture development likely to cause	No acceptable outcome is prescribed.
drainage or disturbance to acid sulfate soils prevents	The decoprision of the process of th
the release of contaminants and impacts on	
fisheries resources and fish habitats.	
Note: Management of acid sulfate soil is consistent with the current Queensland acid sulfate soil technical manual: Soil management guidelines v4.0, Department of Science, Information Technology, Innovation and the Arts, 2014.	
PO7 Aquaculture development is designed,	No acceptable outcome is prescribed.
constructed and operated:	, ,
to not hold or produce <b>fish</b> classified as restricted matted under the <i>Biosecurity Act 2014</i> ; and	
2. for the <b>aquaculture</b> of local endemic species; or	
3. to eliminate the hazards and risks associated	
with non-endemic <b>aquaculture</b> species.	
Note: Further guidance is available in the <b>aquaculture</b> policy Management arrangements for translocation of live aquatic organisms (transport between bioregions) for aquaculture FAMOP015, Department of Employment, Economic Development and Innovation, 2011.	
PO8 Aquaculture development is designed to	No acceptable outcome is prescribed.
maintain the integrity of the aquaculture product	, , , , , , , , , , , , , , , , , , , ,
through:	

Performance outcomes	Acceptable outcomes
1. lawful methods of harvesting of the aquaculture	
product; and	
ensuring food safety and ethical standards will be met.	
PO9 Aquaculture development is designed to	AO9.1 The aquaculture development is designed
provide for the management of <b>disease</b> .	such that any <b>fish</b> mortalities and processing wastes
Note: Further information can be found in the Health management	(including filter residues) are treated and disposed of in accordance with the Australian Government
technical guidelines for aquaculture: Technical guidelines for	Department of Agriculture, Fisheries and Forestry
health management for aquaculture, including aquaculture undertaken under the self-assessable code, Department of	AQUAVETPLAN (as updated from time to time).
Primary Industries and Fisheries (currently Department of Agriculture and Fisheries), 2008.	Note: AQUAVETPLAN is available on the Australian Government
	Department of Agriculture, Fisheries and Forestry website.
Land-based aquaculture development	ACCOMA A Salaman and the salaman and salaman
PO10 Ponds, tanks, containers, aquaria and	AO10.1 A risk assessment has been undertaken
drainage systems are designed, constructed and operated to avoid leakage.	with regards to site and design options, and the outcomes of the risk assessment are applied to the
operated to avoid leakage.	development proposed.
	Note: Risk assessment considerations can be found in the
	Guidelines for constructing and maintaining aquaculture
	containment structures: Guidelines for best practice in-ground
	pond construction for aquaculture, Department of Agriculture, Fisheries and Forestry, 2007.
PO11 The aquaculture development is designed	AO11.1 Aquaculture development is designed and
and constructed to mitigate biosecurity and disease	constructed to prevent impacts on waterways and
risks on the natural environment.	wetlands by:
	being located away from important natural features such as waterways and wetlands:
	a. for tidal habitats:
	i. 100 metres from <b>highest</b>
	astronomical tide outside an urban
	area; or
	ii. 50 metres from <b>highest astronomical</b>
	tide within an urban area b. for non-tidal habitats:
	b. for non-tidal habitats: i. 50 metres from bankfull width outside
	an urban area; and
	ii. 25 metres from bankfull width within
	an urban area
	constructing all ponds above the highest astronomical tide
	3. measures ensuring that all waters (e.g. <b>ponds</b> ,
	tanks, containers and aquaria) on the premises
	are screened to prevent the escape of any
	aquaculture fisheries resources (eggs,
	juveniles or adults) into Queensland waters
	4. for <b>land</b> -based freshwater <b>aquaculture</b> , not allowing <b>discharge</b> from <b>ponds</b> and <b>tanks</b> to
	enter Queensland waters.
	Note: The exception for point 4 is constructed storage dams
	located above Q100 limits and used for the purposes of water storage and reuse only.
	AND
	AO11.2 The design of the aquaculture facility provides control at all times over the containment and release of water from all ponds, tanks and

Performance outcomes	Acceptable outcomes
	drainage systems within the approved aquaculture area.
PO12 Ponds, tanks, containers, aquaria and drainage systems are designed, constructed and operated to ensure immunity from flooding and	AO12.1 The development is not located on flood prone land.
inundation.	AND
	AO12.2 Ponds, tanks, containers and aquaria used to cultivate aquaculture fisheries resources are constructed with the lowest point of the top of wall at least the height of the Q100 flood level, or no lower than the highest known or recorded flood level if Q100 is unavailable.
	AND
	AO12.3 Ponds, tanks, containers and aquaria solely for treatment and settlement (free of aquaculture fisheries resources) are constructed so that the lowest point on the top of wall is at least the height of the Q50 flood level.
	AND
	AO12.4 All in-ground structures, including any structure or impoundment used for the collection or treatment of wastewater, are constructed to prevent the ingress of stormwater run-off; for example by constructing a bund or levee wall around the structure or impoundment.
<ul> <li>PO13 All juvenile or adult wild fauna (excepting zooplankton) are excluded from land-based aquaculture development through:</li> <li>1. the design, construction, and operation preventing entry of fauna; and</li> <li>2. the screening of water introduced into the aquaculture development.</li> </ul>	No acceptable outcome is prescribed.
PO14 Aquaculture development that hold fish capable of overland escape are designed to prevent overland escape.	AO14.1 The aquaculture development is secured to prevent the overland escape of aquaculture product by maintaining a perimeter barrier that is impervious to all size classes of the aquaculture fisheries resources.
PO15 Bioremediation practices for the purpose of aquaculture are designed, constructed, and operated to minimise impacts on fisheries resources.	No acceptable outcome is prescribed.
Tidal aquaculture developments	
PO16 Aquaculture furniture or other structures on tidal land are designed and maintained to prevent stranding or entanglement of native fauna, including, but not limited to:  1. fisheries resources 2. birds 3. marine mammals 4. reptiles.	No acceptable outcome is prescribed.
PO17 The type of aquaculture fisheries resource selected minimises risks to, and avoid impacts on, wild <b>fisheries resources</b> and other indigenous flora and fauna specific to that area.	AO17.1 Aquaculture fisheries resources are not released to or placed in Queensland waters unless they are free of <b>disease</b> and parasites, of the same

Performance outcomes	Acceptable outcomes
Note: Aquaculture fisheries resources must be carefully placed within an authorised area to avoid release or escape of the aquaculture fisheries resource from the approved area.	species and the same genetic stock as the resident population of that area.  AND  AO17.2 Tidal aquaculture is only of native Queensland fish species that are endemic to the
	AND  AO17.3 The aquaculture fisheries resource can and will be produced from sufficient broodstock sourced from the area to ensure appropriate genetic diversity to minimise risks to the environment.
PO18 Structures that hold and contain aquaculture fisheries resources are designed, constructed and operated to prevent the escape or release of aquaculture fisheries resources under the full range of conditions that could be expected at the site.	No acceptable outcome is prescribed.
PO19 Structures associated with aquaculture development are designed, constructed, correctly deployed and operated at all times to prevent movement of the structure from the intended point of placement, anchoring or mooring.	No acceptable outcome is prescribed.
PO20 Aquaculture furniture and other infrastructure is designed, constructed, managed and maintained to avoid impacts to fisheries resources.	AO20.1 Aquaculture furniture does not interfere with natural ecosystems, such as seagrass communities, marine plants or other fisheries resources such as coral.  AND
	AO20.2 Aquaculture furniture and other infrastructure is temporary and does not include any fixed structures in the substrate (except for supporting posts).
	AND  AO20.3 All materials used in the construction of aquaculture furniture or placed within the premises, are of a chemically inactive and non-hazardous nature.
	AND  AO20.4 Other structures, including break walls, fences, boat ramps and jetties, are not constructed
PO21 Aquaculture development that involves oyster farming within Moreton Bay Marine Park is consistent with the current Oyster Industry Plan for Moreton Bay Marine Park, Department of Primary Industries and Fisheries, 2015.  Note: Further information can be found in the Oyster Industry	on areas allocated for <b>prescribed aquaculture</b> .  No acceptable outcome is prescribed.
Management Plan for Moreton Bay Marine Park, Department of Primary Industries and Fisheries, 2015.	

	T
Performance outcomes	Acceptable outcomes
<b>PO22</b> Facilities for the <b>aquaculture</b> of pearl oysters are designed, constructed, maintained, managed and operated to meet pearl oyster quarantine management requirements for Queensland.	No acceptable outcome is prescribed.
Note: Further pearl oyster quarantine information can be found on the Department of Agriculture and Fisheries website.	
Aquaculture of barramundi for inland catchments	
PO23 Aquaculture development does not compromise the ecological integrity of fauna in inland catchments (west of the Great Dividing Range).  Note: Aquacultured barramundi west of the Great Dividing Range (in inland catchments shared with other states) are not to be used for non-food purposes, including stocking Queensland waters or dams.	AO23.1 Development is designed to prevent the spread of disease or the introduction of barramundi into catchments where it does not naturally occur, through:  1. ensuring no water or organisms originating from the aquaculture of barramundi and co-cultured species is permitted to reach Queensland waters without treatment/sterilisation appropriate to render nodavirus nonviable. This includes during the transportation of aquacultured product  2. aquacultured barramundi and co-cultured species must not be sold, traded, stocked into Queensland waters or given away for non-food purposes all containers used to aquaculture barramundi are screened to exclude predators (for example birds) without causing injury to such predators.
Exotic fish	birds) without causing injury to such predators.
PO24 No water or organisms originating from the aquaculture of exotic fish reaches Queensland waters with the exception of waters within	AO24.1 Culture of exotic fish does not occur in open or flow-through systems that discharge into waterways.
constructed storage dams located above Q100 limits and used for the purposes of water storage and reuse only.	AND  AO24.2 All containers used to aquaculture exotic fish are screened to exclude predators (for example
	birds) without causing injury to such predators.
PO25 Commonwealth quarantine protocols have successfully been completed for any fish proposed for production.	No acceptable outcome is prescribed.
Aquaculture of rare, threatened and endangered s	pecies recognised in Commonwealth and state
PO26 Aquaculture development involving rare, threatened or endangered fish that are recognised under state or Commonwealth legislation: 1. provides a net benefit to management of the chosen species 2. avoids or acceptably minimises biosecurity risks 3. manages any risks to rare, threatened or endangered fish.  Note: For example, considering the risks of obtaining broodstock, maintaining the genetic integrity of restricted populations, translocation and disease.	No acceptable outcome is prescribed.
Examples of such species include Queensland lungfish, Mary and Murray River cods, silver perch, honey blue-eye and Oxleyan pygmy perch.  For aquaculture development in the Great Sandy S	Strait Marine Park
i or aquaculture development in the Great Sandy S	Mail Wallie Fair

Performance outcomes	Acceptable outcomes
PO27 Aquaculture development in the Great Sandy Strait Marine Park:	No acceptable outcome is prescribed.
is within a designated <b>aquaculture</b> area identified in the Great Sandy Regional Marine Aquaculture Plan (GSRMAP)	
2. is consistent with the type of <b>aquaculture</b> approved for the designated area; and	
<ol><li>complies with the assessment criteria and conditions of the GSRMAP.</li></ol>	
Note: Further information for applicants can be found in the Implementation guide for Great Sandy Regional Marine Aquaculture Plan, Department of Employment, Economic Development and Innovation (Fisheries Queensland), 2011.	

### 17.2 Reference documents

#### Aquaculture policies and guidelines

Conservation Agreement between the Minister for Sustainability, Environment, Water, Population and Communities on behalf of the Commonwealth of Australia and the Minister for Agriculture, Food and Regional Economies and the Minister for Environment on behalf of the State of Queensland dated 7 September 2011 – Agreement in relation to aquaculture operations in the Great Sandy Marine Park as described in the Great Sandy regional marine aquaculture plan (Queensland Government, approved October 2010) and made under the Environment Protection and *Biodiversity Conservation Act 1999* (Cth)

Department of Agriculture and Fisheries 2017, State Development Assessment Provisions Guidance Material: State code 17: Aquaculture, 2017

Department of Employment, Economic Development and Innovation 2011, FAMOP015 – Management arrangements for translocation of live aquatic organisms (transport between bioregions) for aquaculture

Department of Employment, Economic Development and Innovation (Fisheries Queensland) 2011, Great Sandy Regional Marine Aquaculture Plan (GSRMAP)

Department of Employment, Economic Development and Innovation 2011, Implementation guide for the Great Sandy Regional Marine Aquaculture Plan authorities

Queensland Primary Industries and Fisheries 2003, FAMOP005 – Policy relating to the relaying of oysters within Queensland waters

Queensland Primary Industries and Fisheries 2003, FAMOP006 – Policy relating to the transshipment of oysters into Queensland waters

Queensland Primary Industries and Fisheries 2004, FAMOP001 – Management arrangements for potentially high-risk activities in the context of ecologically sustainable development for aquaculture facilities Note: This includes the following:

- 1. flood prone land
- 2. exotic freshwater fish species
- 3. barramundi in inland catchments
- 4. use of aquacultured product for bait.

Queensland Primary Industries and Fisheries 2007, Guidelines for constructing and maintaining aquaculture containment structures

Queensland Primary Industries and Fisheries 2007, Policy for maximising rock oyster production: management of non-productive oyster areas

Department of Primary Industries and Fisheries 2008, Health management technical guidelines for aquaculture

Queensland Primary Industries and Fisheries 2008, Oyster Industry Management Plan for Moreton Bay Marine Park

#### Translocation and biosecurity

Department of Agriculture, Fisheries and Forestry 2011, Controls over chemical use

Note: This website contains information regarding controls over use of agricultural and veterinary chemicals in the aquaculture industry.

Department of Agriculture, Fisheries and Forestry 2011, FAMPR001 – Health protocol for the importation of selected live penaeid species from outside Queensland's East Coast waters (i.e. Gulf of Carpentaria, Torres Strait, Northern Territory and Western Australia)

Department of Agriculture, Fisheries and Forestry 2011, FAMPR002 – Health protocol for the importation and movement of live barramundi

Department of Agriculture, Fisheries and Forestry 2011, FAMPR003 – Health protocol for the translocation and movement of live bivalve molluscs

Department of Agriculture, Fisheries and Forestry 2011, Preventing disease in aquaculture

Note: This website contains information on the different measures in place to protect Queensland aquaculture from disease outbreaks.

Department of Agriculture, Fisheries and Forestry 2013, Identifying and reporting disease in aquaculture Note: This website contains information on aquaculture health, pests and diseases.

Department of Agriculture, Fisheries and Forestry 2013, Pearl oyster quarantine

Note: This website contains information on pearl oyster quarantine in preventing **disease** introduction to a farm and its spread within the farm.

Department of Employment, Economic Development and Innovation 2011, FAMPR004 – Health protocol for the movement of live marine crustaceans including crabs, lobsters and bugs

Department of Employment, Economic Development and Innovation 2011, FAMPR005 – Health protocol for the movement of live eels

Department of Employment, Economic Development and Innovation 2011, FAMPR006 – Health protocol for the movement of live freshwater crayfish and prawns

Department of Employment, Economic Development and Innovation 2011, FAMPR007 – Health protocol for the movement of live freshwater native finfish (other than barramundi and eels)

#### **Accepted Development**

Department of Agriculture and Fisheries 2017, Accepted development requirements for material change of use that is aquaculture

#### Other references

Australian Government Department of Agriculture, Fisheries and Forestry, AQUAVETPLAN Note: This website contains information on the Australian Aquatic Veterinary Emergency Plan.

Australian Government – Ministerial Council on Forestry, Fisheries and Aquaculture 1999, National policy for the translocation of live aquatic organisms – Issues, principles and guidelines for implementation

Department of Environment and Heritage Protection 2014, Queensland Environmental Offsets Policy

Department of Science, Information Technology, Innovation and the Arts 2014, Queensland Acid Sulfate Soil Technical Manual

International Erosion Control Association 2008, Best Practice Erosion and Sediment Control Guidelines

## 17.3 Glossary of terms

Aquaculture see the schedule of the Fisheries Act 1994.

Note: Aquaculture means the cultivation of live fisheries resources for sale other than in circumstances prescribed under a regulation.

#### Aquaculture fisheries resources see the schedule of the Fisheries Act 1994.

Note: Aquaculture fisheries resources means live fish and other marine plants cultivated in aquaculture.

#### Aquaculture furniture see the schedule of the Fisheries Act 1994.

Note: Aquaculture furniture means a cage, rack, tank, tray or anything else used, or capable of being used, in aquaculture or to assist in aquaculture.

#### **AQUAVETPLAN** means the Australian Aquatic Veterinary Emergency Plan.

Note: **AQUAVETPLAN** is a series of manuals that outline Australia's approach to national **disease** preparedness and propose the technical response and control strategies to be activated in a national aquatic animal **disease** emergency. The manuals also provide guidance based on sound analysis, linking policy, strategies, implementation, coordination and emergency management plans.

## **Bioremediation** means the branch of biotechnology that uses biological processes to overcome environmental problems.

Note: For example, the culture of **fisheries resources** for the purpose of improving the quality of **discharge** water from treatment and settlement **ponds**.

**Biosecurity** means protection from the risks posed by organisms to the economy, environment and people's health.

#### Container see the schedule of the Fisheries Act 1994.

Note: Container includes a basket, case and tray.

Discharge means the release of wastewater into natural waterways.

#### Disease see section 94 of the Fisheries Act 1994.

Note: Disease means:

- a disease, parasite, pest, plant or other thing (the disease) that has, or may have, the effect (directly or indirectly) of killing or causing illness in fisheries resources, or in humans or animals that eat fisheries resources infected with or containing the disease; or
- 2. a chemical or antibiotic residue; or
- 3. a species of a **fish** or plant that may compete against **fisheries resources** or other **fisheries resources** to the detriment of the **fisheries resources** or other **fisheries resources**.

#### **Exotic fish** means **fish** originating from anywhere outside Queensland.

#### Fish see section 5 of the Fisheries Act 1994.

Note: Fish:

- 1. means an animal (whether living or dead) of a species that throughout its life cycle usually lives:
  - a. in water (whether freshwater or saltwater)
  - b. in or on foreshores; or
  - c. in or on land under water
- 2. includes:
  - a. prawns, crayfish, rock lobsters, crabs and other crustaceans
  - b. scallops, oysters, pearl oysters and other molluscs
  - c. sponges, annelid worms, bêche-de-mer and other holothurians
  - d. trochus and green snails
  - e. however, does not include:
  - f. crocodiles
  - a. protected animals under the *Nature Conservation Act* 1992
  - h. pests under the Pest Management Act 2001; or
  - animals prescribed under a regulation not to be fish
- also includes:
  - a. the spat, spawn and eggs of fish
  - b. any part of **fish** or of spat, spawn or eggs of **fish**
  - c. treated fish, including treated spat, spawn and eggs of fish
  - d. coral, coral limestone, shell grit or star sand
  - e. freshwater or saltwater products declared under a regulation to be **fish**.

#### Fisheries resources see the schedule of the Fisheries Act 1994.

Note: Fisheries resources includes fish and marine plants.

#### Fishing see the schedule of the Fisheries Act 1994.

Note: Fishing includes:

- 1. searching for, or taking, fish
- 2. attempting to search for, or take, fish
- 3. engaging in other activities that can reasonably be expected to result in the locating, or taking, of fish
- 4. landing fish (from a boat or another way), bringing fish ashore or transhipping fish.

**Highest astronomical tide** means the highest level of the tides that can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions.

#### Land see the schedule of the Fisheries Act 1994.

Note: Land includes foreshores and tidal and non-tidal land.

#### Marine park see the Marine Parks Act 2004.

Note: Marine park means a marine park declared, or taken to be declared, under the Marine Parks Act 2004.

#### Marine plant see section 8 of the Fisheries Act 1994.

Note: Marine plant includes the following:

- 1. a plant (a tidal plant) that usually grows on, or adjacent to, tidal land, whether it is living, dead, standing or fallen
- 2. material of a tidal plant, or other plant material on tidal land
- 3. a plant, or material of a plant, prescribed under a regulation or management plan to be a marine plant.

A marine plant does not include a plant that is a declared pest under the Land Protection (Pest and Stock Route Management) Act 2002.

**Pond** means an earthen in-ground **container**.

Prescribed aquaculture means aquaculture for which a resource allocation authority has been obtained.

#### Resource allocation authority see the schedule of the Fisheries Act 1994.

Note: **Resource allocation authority** means a **resource allocation authority** issued, and in force, under part 5, division 3, subdivision 2A of the *Fisheries Act 1994*.

Tank means an above-ground container used for intensive aquaculture within an enclosed facility.

#### Tidal land see the schedule of the Fisheries Act 1994.

Note: Tidal land includes reefs, shoals and other land permanently or periodically submerged by waters subject to tidal influence.

**Translocation** means the movement of live aquatic organisms (including all stages of the organism's life cycle and any derived viable genetic material):

- 1. beyond its accepted distribution; or
- 2. to areas which contain genetically distinct populations; or
- 3. to areas with superior parasite or **disease** status.

#### Waterway see the schedule of the Fisheries Act 1994.

Note: Waterway includes a river, creek, stream, watercourse or inlet of the sea.

# State code 18: Constructing or raising waterway barrier works in fish habitats

## **18.1 Purpose statement**

The purpose of the code is to ensure that development involving the constructing or raising of **waterway barrier works** in a **fish habitat**:

- 1. maintains fish movement and connectivity throughout waterways and within and between fish habitats
- 2. maintains the health and productivity of fisheries resources and fish habitat
- 3. maintains the community and fishing sectors' use of the area and access to fisheries resources
- 4. only occurs only where there is a need for the development and no other reasonable alternative exists
- 5. provides adequate **fish** passage including a **fish way**, if necessary
- 6. avoids impacts on marine plants, waterways that provide for fish passage and declared fish habitat areas that are matters of state environmental significance, and where avoidance is not reasonably possible, minimises and mitigates impacts, and provides an offset for significant residual impacts where appropriate.

Note: For guidance on how to determine whether this code applies to development, see fact sheets:

- 1. Maintaining Fish Passage in Queensland: What is a waterway, Department of Agriculture, Fisheries and Forestry, 2014
- 2. Maintaining Fish Passage in Queensland: What is a waterway barrier work, Department of Agriculture, Fisheries and Forestry, 2014
- 3. Maintaining Fish Passage in Queensland: What is not a waterway barrier work, Department of Agriculture, Fisheries and Forestry,

## 18.2 Performance outcomes and acceptable outcomes

Development that is operational work for constructing or raising **waterway barrier works** in **fish habitats** should demonstrate compliance with the relevant provisions of table 18.2.2. For further details of the specific performance outcomes to be addressed, please refer to table 18.2.1.

Table 18.2.1: Development type and relevant provisions of the code

Development	Relevant provisions of code
All development	Table 18.2.2 – PO1 – PO18
Development involving fish ways	Table 18.2.2 – PO19 – PO28
Development involving floodgates	Table 18.2.2 – PO29 – PO31
Temporary waterway barrier works	Table 18.2.2 – PO32 – PO35
Matters of state environmental significance	Table 18.2.2 – PO36

Table 18.2.2: Operational work

Performance outcomes	Acceptable outcomes	
All development		
PO1 There is a demonstrated need for the development and alternatives (locations and designs) which do not involve constructing or raising waterway barrier works are not viable.	No acceptable outcome is prescribed.	
<b>PO2</b> Development has a functional requirement to be located within a <b>waterway</b> . Ancillary elements of development occur outside the <b>waterway</b> .	No acceptable outcome is prescribed.	
Note: Bed and banks of the <b>waterway</b> and any associated wetlands and riparian areas within the development site should be accurately identified on plans provided with the application, together with the location of highest astronomical tide, mean high water spring and mean low water spring tide heights if the <b>waterway</b> is tidal.		

Performance outcomes	Acceptable outcomes
PO3 The number and extent of waterway barrier	No acceptable outcome is prescribed.
works and the spatial and temporal extent of their	' '
impacts on waterways providing for fish passage	
are minimised.	For the second second
<b>PO4</b> For the life of the barrier, adequate <b>fish</b> passage must be provided and maintained at all	For all crossings:
<ul> <li>waterway barrier works through:</li> <li>fish way(s) that adequately provide for the movement of fish; or</li> <li>the movement of fish is adequately provided for in another way.</li> </ul>	AO4.1 Hydraulic conditions (depth, velocities and turbulence) from the downstream to the upstream limit of the structure allow for <b>fish</b> passage of all <b>fish</b> attempting to move through the crossing at all flows up to the <b>drownout</b> of the structure.
	AND
	AO4.2 For the life of the crossing, the relative levels of:  1. a bed level crossing or a culvert invert  2. bed erosion protection  3. apron scour protection; and  4. the stream bed are maintained to avoid drops in elevation at their joins.
	AND
	AO4.3 The crossing and associated erosion protection structures are installed at no steeper gradient than the waterway bed gradient.
	AND
	AO4.4 The crossing and associated erosion protection structures are roughened throughout to approximately simulate natural bed conditions.
	AND
	<b>AO4.5</b> Design and maintenance measures are in place for the life of the crossing to keep crossings clear of blockages through a regular inspection program in order to retain <b>fish</b> passage through the crossing.
	AND
	For <b>waterway</b> crossings other than bridges and culverts:
	AO4.6 The crossing is built at or below bed level so that the surface of the crossing is no higher than the stream bed at the site.
	AND
	AO4.7 The lowest point of the crossing is installed at the level of the lowest point of the natural stream bed (pre-construction), within the footprint of the proposed crossing.
	AND

Performance outcomes	Acceptable outcomes
	AO4.8 There is a height difference between the lowest point of the crossing and the edges of the low flow section of the crossing so that water is channelled into the low flow section of the crossing.
	AND
	<b>AO4.9</b> The level of the remainder of the crossing is no higher than the lowest point of the natural stream bed outside of the low flow channel.
	AND
	For bridges:
	<b>AO4.10</b> Bridge support piles are not constructed within the low-flow channel and do not constrict the edges of the low-flow channel, and the number of piles in-stream are minimised.
	AND
	<b>AO4.11</b> Bridge abutments and bank revetment works do not extend into the <b>waterway</b> beyond the toes of the banks.
	AND
	<b>AO4.12</b> Suitable <b>fish habitats</b> are maintained within the low-flow channel.
	AND
	For culverts:
	AO4.13 Culverts are only installed where the site conditions do not allow for a bridge.
	AND
	AO4.14 The combined width of the culvert cell apertures are equal to 100 percent of the main channel width.
	AND
	<ul> <li>AO4.15 The base of the culvert incorporates a low flow channel consistent with the natural low flow channel and:</li> <li>1. is buried a minimum of 300 millimetres to allow bed material to deposit and reform the natural bed on top of the culvert base; or</li> <li>2. the base of the culvert is the stream bed; or</li> <li>3. the base of the culvert cell and any instream scour protection is roughened throughout to approximately simulate natural bed conditions.</li> </ul>
	AND

Performance outcomes	Acceptable outcomes
	AO4.16 The outermost culvert cells incorporate roughening elements such as baffles on their bankside sidewalls.
	AND
	AO4.17 Roughening elements are installed on the upstream wingwalls on both banks to the height of the upstream obvert or the full height of the wingwall.
	AND
	AO4.18 Roughening elements provide a contiguous lower velocity zone (no greater than 0.3 metres/second) for at least 100 millimetres width from the wall through the length of the culvert and wingwalls.
	AND
	AO4.19 Culvert alignment to the stream flow minimises water turbulence.
	AND
	AO4.20 There is sufficient light at the entrance to and through the culvert so that <b>fish</b> are not discouraged by a sudden darkness.
	AND
	AO4.21 The depth of cover above the culvert is as low as structurally possible, except where culverts have an average recurrence interval (ARI) greater than 50 years.
	AND
	<b>AO4.22</b> For culvert crossings designed with a flood immunity ARI greater than 50 years, <b>fish</b> passage is provided up to culvert capacity.
	For all other development no acceptable outcome is prescribed.
PO5 Waterway barrier works are designed, constructed, operated and maintained to provide lateral and longitudinal fish passage for all members of the fish community, regardless of size, species, life-stage or swimming ability, and accommodating future and seasonal increases in fish biomass.  Note: In order to demonstrate compliance with this performance outcome, the seasonal and flow related biomass of the fish community at the location of the proposed waterway barrier works will need to be surveyed and addressed in the design of the fish way by a person suitably qualified and experienced in fish passage biology. In addition, any future increases in fish biomass should be quantified and catered for.	No acceptable outcome is prescribed.

Davi	.f	Assertable automos
	formance outcomes	Acceptable outcomes
pern	gitudinal <b>fish</b> passage refers to the movement into both nanent and temporary offstream systems, including wetlands,	
lago	ons, floodplain etc. Fragmentation of connectivity into and out	
	ese systems must be mitigated via adequate <b>fish</b> passage.	No accontable outcome is prescribed
	6 Development is designed and operated so that	No acceptable outcome is prescribed.
	components of waterway barrier works (for ample scour protection, intake and outlet	
	intple secul protection, make and outlet	
	sipation structures) and all pathways of potential	
	n movement provide safe <b>fish</b> passage.	
	pped spillways (including sheet pile weirs) are	
	acceptable.	
	e: Stepped spillway (including sheet pile weirs) have been ociated with high mortalities and injuries to <b>fish</b> .	
asso	ociated with high mortalities and injuries to fish.	
	essment of this performance outcome will include	
	sideration of adequate tailwater depth at the toe of the way (for example: stilling basin) at commencement to spill (for	
	mple: 30 percent of the head difference).	
	7 The drownout characteristics of the waterway	No acceptable outcome is prescribed.
	rier works and the frequency, timing and	
	ation of <b>drownout</b> conditions will provide	
	equate <b>fish</b> passage for the <b>fish</b> community and	
וסומ	mass moving past the barrier.	
Note	e: Determining adequacy of <b>fish</b> passage will involve	
cons	sideration of passage achieved during drownout and during	
	r hydraulic conditions and the relative frequencies of these ditions among other things.	
	8 Development does not increase the risk of	No acceptable outcome is prescribed.
	rtality, <b>disease</b> or injury, or compromise the	acceptable dated in a produit out
	ulth, productivity, marketability or suitability for	
hun	nan consumption of fisheries resources, having	
_	ard to (but not limited to):	
1.	,	
	sediment quality	
2.	substances that are toxic to plants or toxic to or	
2	cumulative within <b>fish</b>	
3. 4.	design of structures impacts on reproductive success	
5.	effect on <b>fish</b> energy reserves	
	whether <b>fish</b> may be physically damaged,	
	injured, killed, trapped or stranded	
7.	fish passage and access to habitat generally;	
	and	
8.	the impacts of pest <b>fish</b> and other relevant pest	
	species.	
Nata	or A figh column plan may be required to demonstrate	
	e: A <b>fish</b> salvage plan may be required to demonstrate pliance with the performance outcome and may form a	
	dition of any approval.	
Perr	nits or other authorities may be required under the Fisheries	
	1994 for the use of regulated <b>fishing</b> apparatus and to	
	ess fisheries resources.	
	9 Development:	No acceptable outcome is prescribed.
1.	avoids non-essential hardening or unnatural modification of the <b>main channel</b> of the	
	waterway	
2.	retains natural <b>fish habitat</b> and features such as	
	rock outcrops and boulders, wherever possible	
	, , , , , , , , , , , , , , , , , , , ,	

Performance outcomes	Acceptable outcomes
3. avoids channelisation (i.e. straightening) of	
meandering <b>waterways</b> or where channels need	
to be significantly modified, simulates natural	
watercourses and habitat features (for example,	
by including meanders, pools, riffles, shaded	
and open sections, deep and shallow sections	
and different types of substrata); and	
4. avoids construction during times of elevated	
flows.	
PO10 Where waterway barrier works will modify	No acceptable outcome is prescribed.
water levels or flow characteristics of the waterway,	No acceptable outcome is prescribed.
existing up and downstream structures are upgraded	
to provide adequate <b>fish</b> passage in accordance	
with the new levels or flow characteristics.	
PO11 Sufficient water exchange and flow is	No acceptable outcome is prescribed.
maintained and provided to sustain and where	No acceptable outcome is prescribed.
necessary restore, water quality and the health and	
condition of <b>fisheries resources</b> , ecological	
functions and <b>fish</b> passage.	No acceptable cutoma is managed to d
PO12 Development likely to cause drainage or	No acceptable outcome is prescribed.
disturbance to acid sulfate soils, prevents the	
release of contaminants and impacts on fisheries	
resources and fish habitats.	
Note: Management of acid sulfate soil is consistent with the	
current Queensland acid sulfate soil technical manual: Soil	
Management Guidelines V4.0, Department of Science,	
Information Technology, Innovation and the Arts, 2014.	
PO13 Construction avoids direct and indirect	No acceptable outcome is prescribed.
disturbance, or where avoidance is not possible,	
minimises direct and indirect disturbance to beds,	
banks and vegetation adjacent to the permanent	
development footprint.	
<b>PO14</b> After completion of in-stream works, disturbed	No acceptable outcome is prescribed.
areas of the bed and banks of the waterway outside	
the permanent development footprint are returned to	
their original profile and stabilised to promote	
regeneration of natural fish habitats.	
Note: Monitoring of the success of <b>fish habitat</b> regeneration,	
within and adjacent to the work site, is likely to be conditioned as	
part of any development approval.  PO15 The natural substrate of the waterway bed is	No acceptable outcome is prescribed.
retained or reconstructed so that the post-	The acceptable dateonic is prescribed.
construction substrate is comparable to the natural	
substrate; for example in terms of size and	
PO16 Development does not adversely impact on	No acceptable outcome is prescribed
	No acceptable outcome is prescribed.
community access to tidal land and waterways.	No acceptable outcome is prescribed
PO17 Development does not adversely impact on	No acceptable outcome is prescribed.
community access to fisheries resources and fish	
habitats including recreational and indigenous	
fishing access.	
Note: In some cases, componentian for impact on fighering	
Note: In some cases, compensation for impact on <b>fisheries</b> access, operations and/or productivity may be necessary. The	
Guideline on fisheries adjustment provides advice for proponents	
on relevant <b>fisheries</b> adjustment processes and is available by	
request from the Department of Agriculture and Fisheries.	No accordable autorior la consula de
PO18 Development does not adversely impact on	No acceptable outcome is prescribed.
commercial <b>fishing</b> access and linkages between a	

Pe	rformance outcomes	Acceptable outcomes
	nmercial <b>fishery</b> and infrastructure, services and	
	ilities.	
	e: In some cases, compensation for impact on fisheries	
	ess, operations and/or productivity may be necessary. The	
	deline on fisheries adjustment provides advice for proponents elevant <b>fisheries</b> adjustment processes and is available by	
	uest from the Department of Agriculture and Fisheries.	
	velopment involving fish ways	
	<b>19</b> Having regard to the hydrology of the site and	AO19.1 For the life of the waterway barrier works,
	n movement characteristics, the <b>fish way</b> is	the lower operational range of the <b>fish way</b> is at
	pable of operating, and will operate:	least:
	for as long as the <b>waterway barrier work</b> is in	1. 0.5 metres below minimum headwater
''	position; and	drawdown level; and
2.	whenever there are inflows into the	2. 0.5 metres below minimum tail water level at the
	impoundment or <b>waterway</b> , release out of the	site.
	impoundment and during overtopping events;	one.
	and	
3.	when the impoundment is above dead storage	
٥.	level.	
PO	20 For the life of the waterway barrier works,	AO20.1 The lower operational range of the fish way
	hydrology of the development allows for	is at least:
	equate <b>fish</b> movement.	1. 0.5 metres below minimum headwater
aue	equate <b>11511</b> movement.	
		drawdown level; and 2. 0.5 metres below minimum tail water level at the
DO.	24 Fish way maximises fish mayoment by	Site.
	21 Fish way maximises fish movement by viding:	No acceptable outcome is prescribed.
	continuous attraction flows at the <b>fish way</b>	
١.		
	entrance under all flow conditions within the <b>fish</b>	
	way's operating range	
2.	additional means of <b>fish</b> attraction are included	
2	in the <b>fish way</b> design if appropriate	
3.	attraction flow velocities are sufficient and	
	variable to attract the whole <b>fish</b> community,	
4	and expected future and seasonal biomass	
4.	adequate holding chamber capacity for the	
	expected <b>fish</b> biomass in any lock, lift, trap and	
_	transfer type <b>fish ways</b>	
5.	adequate exit conditions for downstream fish	
_	passage; and	
6.	for future adjustments in capacity or operation	
	that may be needed once in place.	No constalle a fee a second
	22 Fish ways are designed so that:	No acceptable outcome is prescribed.
1.	water intakes, outlets, screens and other	
	structures do not cause entrainment, injury or	
_	mortality to <b>fish</b>	
2.	appropriate light levels are maintained at	
	entrances, exits and throughout the <b>fish way</b> to	
	ensure successful use by <b>fish</b>	
3.	fish attracted to the spillway or outlet flows are	
	able to access the <b>fish way</b> without having to	
	swim back downstream	
4.	fish are able to exit upstream and downstream	
	fish ways at a water levels over the full range of	
	tailwater and headwater levels	
5.	exits are located to avoid fish being washed	
	back over the spillway during overtopping	
	1 -7 - 2 - 1 - 1 - 1 - 1	

Performance outcomes	Acceptable outcomes
adequate hydraulic conditions and minimum	Acceptable outcomes
water depth for <b>fish</b> passage is maintained	
throughout the <b>fish way</b> 7. predation on <b>fish</b> using the <b>fish way</b> is avoided	
8. rubbish and debris do not impede <b>fish</b> passage	
or cause blockages or damage the <b>fish way</b>	
9. delays in <b>fish</b> movement are avoided when <b>fish</b>	
are undertaking upstream spawning migrations;	
and	
10. delays in <b>fish</b> movement are avoided	
immediately after times when there have been	
flows in the system but no <b>fish</b> passage in the	
rising hydrograph.	
PO23 All water releases are directed through the	No acceptable outcome is prescribed.
fish way as a priority over the outlet works.	
PO24 All flows and releases initiate and terminate	No acceptable outcome is prescribed.
adjacent to the <b>fish way</b> or are directed parallel to	
the <b>fish way</b> entrance and all flows are transferred	
to the <b>fish way</b> as soon as possible during a flow	
recession.	
Note: Flows and releases include but are not limited to spillway	
overtopping and outlet flows. Such flows must not compete with <b>fish way</b> attraction flows or reduce the operation of a <b>fish way</b> .	
PO25 Mechanisms are in place to ensure that	No acceptable outcome is prescribed.
operational issues in <b>fish ways</b> are promptly	Two acceptable outcome is presembed.
rectified for the life of the <b>fish way</b> including but not	
limited to:	
all components are designed to be durable,	
reliable and adequately protected from damage	
during high flow and flood events	
all components can be replaced; and	
3. a contingency plan ensures provision of	
,	
alternate adequate <b>fish</b> passage during the <b>fish way</b> re-instatement process.	
way re-instatement process.	
Note: <b>Fish way</b> downtime greater than 14 consecutive calendar	
days is likely to have a significant impact to <b>fisheries resources</b> .	
PO26 Development provides for:	No acceptable outcome is prescribed.
installation of monitoring equipment (such as	1 1
traps and lifting equipment); and	
2. access for monitoring, maintenance and	
operational purposes.	
PO27 Water supply for the fish ways and attraction	No acceptable outcome is prescribed.
flows are sourced from surface quality water or	asseptable satisfine to procenibed.
equivalent water quality.	
PO28 Tailwater control structures such as a gauging	No acceptable outcome is prescribed.
weir, rock bar or stream crossings are fitted with a	Two acceptable outcome is prescribed.
<b>fish way</b> or designed to provide <b>fish</b> passage.	
Development involving floodgates	No acceptable outcome is prescribed
PO29 Floodgates are designed and operated:	No acceptable outcome is prescribed.
1. to provide hydraulic conditions adequate for <b>fish</b>	
passage over an adequate duration of the tidal	
cycle; and	
2. as tidally activated, automatic floodgates.	
PO30 The invert of the floodgate is at bed level.	No acceptable outcome is prescribed.
PO31 The operation of the floodgate will not result in	No acceptable outcome is prescribed.
adverse impacts on water quality that may harm <b>fish</b>	
or fish habitat.	

Performance outcomes	Acceptable outcomes
Temporary waterway barrier works	
PO32 The temporary waterway barrier works will exist only for a specified temporary period and provide for adequate fish movement.	AO32.1 The temporary waterway barrier work:  1. is a partial barrier, or  2. does not constrict the area or flows of a low flow channel.
	AND one of the following acceptable outcomes apply
	AO32.2 The temporary structure is only in place outside of known <b>fish</b> spawning or migration periods.
	OR
	AO32.3 The barrier is opened periodically every five days for at least 48 hours to allow <b>fish</b> movement and water exchange.
	OR
	AO32.4 Fish movement is provided for via a stream diversion.
<b>PO33</b> Temporary barriers are removed at the end of their design life, so that full movement for <b>fish</b> is reinstated and the bed and banks are returned to their original profile and stability.	No acceptable outcome is prescribed.
<b>PO34</b> Where there are species, at the site of the temporary <b>waterway barrier works</b> that require downstream movement during works, provisions are made to allow those species to move downstream.	No acceptable outcome is prescribed.
PO35 The condition and value of aquatic macrophytes and other fish habitats is maintained.	No acceptable outcome is prescribed.
Matters of state environmental significance	
PO36 Development:  1. avoids impacts on matters of state environmental significance; or  2. minimises and mitigates impacts on matters of state environmental significance after demonstrating avoidance is not reasonably possible; and  3. provides an offset if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable significant residual impact on a matter of state environmental significance.	No acceptable outcome is prescribed.
Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1 Conservation/Buffer, E2 Open Space or Buffer/Investigation in the Brisbane Port LUP precinct plan. For the Brisbane Port LUP, see www.portbris.com.au.	
Note: For the purpose of this code, the matters of state environmental significance assessed are marine plants, waterways that provide for fish passage and declared fish habitat areas.	
Guidance for determining if the development will have a significant residual impact on the matter of state	

Performance outcomes	Acceptable outcomes
environmental significance is provided in the Significant	
Residual Impact Guideline, Department of State Development,	
Infrastructure and Planning, 2014. Where the significant	
residual impact is considered an acceptable impact on the	
matter of state environmental significance under the	
Environmental Offsets framework and an offset is considered	
appropriate, the <b>offset</b> should be delivered in accordance with the	
Environmental Offsets Act 2014.	

### 18.3 Reference documents

Department of Agriculture and Fisheries website, What is a waterway?

Department of Agriculture and Fisheries website, What is a waterway barrier work?

Department of Agriculture and Fisheries website, What is not a waterway barrier work?

Department of Environment and Heritage Protection 2016, Queensland environmental offsets framework documents

Department of National Parks, Sport and Racing 2005, Fish habitat area code of practice: The lawful use of physical, pesticide and biological controls in a declared fish habitat area.

Department of Primary Industries 1998, Restoration of fish habitats: Fisheries guidelines for marine areas FHG 002

Department of Primary Industries 2000, Fisheries guidelines for fish habitat buffer zones FHG 003

Department of Primary Industries and Fisheries 2006, Fisheries guidelines for fish-friendly structures FHG 006

Department of State Development, Infrastructure and Planning 2014, Significant residual impact guideline

Local Government Association of Queensland 2012, Mosquito management code of practice

#### **Policies**

Department of National Parks, Sport and Racing 2013, Marine resource management: Fish habitat Area selection, assessment, declaration and review

Department of National Parks, Sport and Racing 2015, Marine resource management: Management of declared fish habitat areas

Department of Primary Industries 1998, Departmental procedures for provision of fisheries comments: Dredging, Extraction and Spoil Disposal Activities (FHMOP 004)

Department of Primary Industries and Fisheries 2007, Management and protection of marine plants and other tidal fish habitats (FHMOP001)

Department of Primary Industries and Fisheries 2007, Tidal fish habitats, erosion control and beach replenishment (FHMOP010)

Department of Agriculture and Fisheries 2015, Oyster industry Management Plan for Moreton Bay Marine Park

Ministerial Council on Forestry, Fisheries and Aquaculture 1999, National Policy for the Translocation of Live Aquatic Organisms – Issues, Principles and Guidelines for Implementation

Queensland Department of Primary Industries 1996, Departmental Procedures for Permit Applications Assessment and Approvals for Insect Pest Control in Coastal Wetlands (FHMOP 003)

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#### **Accepted development**

Department of Agriculture and Fisheries 2017, Accepted development requirements for operational work that is constructing or raising waterway barrier works

Department of National Parks, Sport and Racing 2005, Fish habitat area code of practice: The lawful use of physical, pesticide and biological controls in a declared fish habitat area

#### Other references

Department of Agriculture, Fisheries and Forestry 2012, Declared Fish Habitat Area Network Assessment Report 2012

Department of Agriculture, Fisheries and Forestry 2013, Guideline on fisheries adjustment as a result of development

Department of Employment, Economic Development and Innovation 2010, Declared fish habitat area network strategy 2009-14: Planning for the future of Queensland's declared fish habitat area network

Department of Environment and Resource Management 2011, Queensland Wetland Buffer Planning Guideline

Department of National Parks, Recreation, Sport and Racing 2013, Declared fish habitat area network progress report – June 2013

Department of National Parks, Recreation, Sport and Racing website, Declared fish habitat area plans

Department of Natural Resources and Mines 2002, Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines

International Ecohydraulics Symposium 2012, From Sea to Source: International guidance for the restoration of fish migration highways

International Erosion Control Association Australasia 2008, Best practice erosion and sediment control document

SEQ Catchments website

## 18.4 Glossary of terms

#### Declared fish habitat area see the Fisheries Act 1994.

Note: **Declared fish habitat area** means an area that is declared under the *Fisheries Act 1994* to be a **fish habitat** area. Section 120 of the *Fisheries Act 1994* deals with declaration of **fish habitat** areas.

Disease see section 94 of the Fisheries Act 1994.

Note: Disease means:

- a disease, parasite, pest, plant or other thing (the disease) that has, or may have, the effect (directly or indirectly) of killing or causing illness in fisheries resources, or in humans or animals that eat fisheries resources infected with or containing the disease
- 2. a chemical or antibiotic residue
- a fish or plant species that may compete against fisheries resources or other fisheries resources to the detriment of the fisheries resources or other fisheries resources.

**Drownout** means when the tailwater and headwater levels across a weir are essentially equal, velocities are sufficiently low at, or close to, the edge of the spillway crest and the weir is fully submerged to a sufficient depth to allow for **fish** passage and for the species and size-classes of **fish** moving through the site to cross the weir.

Fish see section 5 of the Fisheries Act 1994.

Note: Fish:

- 1. means an animal (whether living or dead) of a species that throughout its life cycle usually lives:
  - a. in water (whether freshwater or saltwater); or
  - b. in or on foreshores; or
  - c. in or on land under water
- includes:

- a. prawns, cravfish, rock lobsters, crabs and other crustaceans
- b. scallops, oysters, pearl oysters and other molluscs
- c. sponges, annelid worms, beche-de-mer and other holothurians
- d. trochus and green snails
- 3. does not include:
  - a. crocodiles; or
  - b. protected animals under the Nature Conservation Act 1992; or
  - c. pests under the Pest Management Act 2001; or
  - d. animals prescribed under a regulation not to be fish
- also includes:
  - a. the spat, spawn and eggs of fish
  - b. any part of **fish** or spat, spawn or eggs of **fish**
  - c. treated fish, including treated spat, spawn and eggs of fish
  - d. coral, coral limestone, shell grit or star sand
  - e. freshwater or saltwater products declared under a regulation to be fish.

#### Fish habitat see the Fisheries Act 1994.

Note: Fish habitat includes land, waters and plants associated with the life cycle of fish, and includes land and waters not presently occupied by fisheries resources.

#### Fish way see the Fisheries Act 1994.

Note: Fish way means a fish ladder or another structure or device by which fish can pass through, by or over waterway barrier works.

#### Fisheries resources see the Fisheries Act 1994.

Note: Fisheries resources includes fish and marine plants.

#### Fishery see section 7 of the Fisheries Act 1994.

Note: Fishery means activity by way of fishing, for example, activities specified by reference to all or any of the following:

- 1. a species of fish
- 2. a type of fish by reference to sex, size or age or another characteristic
- 3. an area
- 4. a way of fishing
- 5. a type of boat
- a class of person
- 7. the purpose of an activity
- 8. the effect of the activity on a fish habitat, whether or not the activity involves fishing
- 9. anything else prescribed under a regulation.

#### Fishing see the Fisheries Act 1994.

Note: Fishing includes:

- 1. searching for, or taking, fish
- 2. attempting to search for, or take, fish
- 3. engaging in other activities that can reasonably be expected to result in the locating, or taking, of fish
- 4. landing fish (from a boat or in another way), bringing fish ashore or transhipping fish.

#### Foreshore see the Fisheries Act 1994.

Note: Foreshore means parts of the banks, beds, reefs, shoals, shore and other land between high water and low water.

#### Legally secured offset area see the Environmental Offsets Act 2014.

Note: An area of land is a legally secured offset area if:

- 1. the area is:
  - a. an environmental offset protection area; or
  - b. an area declared as an area of high nature conservation value under section 19F of the Vegetation Management Act 1999; or
  - c. another area prescribed under a regulation; and
- 2. under the *Environmental Offsets Act 2014* or another Act, the area is subject to a delivery or management plan or agreement (however described in this Act or the other Act) to achieve a conservation outcome for a **prescribed environmental matter**.

**Main channel** means the active component of the flow channel of a **waterway** characterised by a distinct change in appearance or structure at the upper limit of the channel (refer to accepted development requirements for examples).

#### Marine plant see section 8 of the Fisheries Act 1994.

Note: Marine plant includes the following:

- 1. a plant (a tidal plant) that usually grows on, or adjacent to, tidal land, whether it is living, dead, standing or fallen
- 2. material of a tidal plant, or other plant material on tidal land
- 3. a plant, or material of a plant, prescribed under a regulation or management plan to be a marine plant.

A marine plant does not include a plant that is a declared pest under the Land Protection (Pest and Stock Route Management) Act 2002.

## **Matters of state environmental significance** (MSES) see schedule 2 of the Environmental Offsets Regulation 2014.

Note: Matters of state environmental significance are prescribed environmental matters under the Environmental Offsets Regulation 2014 that require an offset when a prescribed activity will have a significant residual impact on the matter. A matter of state environmental significance is any of the following matters:

- 1. regional ecosystems under the Vegetation Management Act 1999 that:
  - a. are endangered regional ecosystems
  - b. are of concern regional ecosystems
  - c. intersect with a wetland shown on the vegetation management wetlands map
  - d. contain areas of essential habitat shown on the essential habitat map for an animal that is endangered wildlife or vulnerable wildlife or a plant that is endangered wildlife or vulnerable wildlife
  - e. are located within the defined distances stated in the Environmental Offsets Policy 2014 from the defining banks of a relevant watercourse or drainage feature as shown on the vegetation management watercourse and drainage feature map; or
  - f. are areas of land determined to be required for ecosystem functioning ('connectivity areas')
- wetlands in a wetland protection area or wetlands of high ecological significance shown on the map of referable wetlands under the Environmental Protection Regulation 2008
- 3. wetlands and watercourses in high ecological value waters as defined in schedule 2 of the Environmental Protection (Water) Policy 2009
- 4. designated precincts in strategic environmental areas under the Regional Planning Interests Regulation 2014
- threatened wildlife under the Nature Conservation Act 1992 and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006
- 6. protected areas under the Nature Conservation Act 1992 excluding coordinated conservation areas
- 7. highly protected zones of state marine parks under the Marine Parks Act 2004
- 8. declared fish habitat areas under the Fisheries Act 1994
- 9. **waterways** that provide for **fish** passage under the *Fisheries Act 1994* if the construction, installation or modification of **waterway barrier works** carried will limit the passage of **fish** along the **waterway**
- 10. marine plants under the Fisheries Act 1994; or
- 11. legally secured offset areas.

#### Offset means environmental offset under the Environmental Offsets Act 2014.

Note: Environmental **offset** means an activity undertaken to counterbalance a **significant residual impact** of a prescribed activity on a **prescribed environmental matter**, delivered in accordance with the Environmental offsets framework, Department of Environment and Heritage Protection, 2014. The **prescribed environmental matters** assessed under the State Development Assessment Provisions are **matters of state environmental significance**.

#### Prescribed environmental matters see the Environmental Offsets Act 2014.

Note: A **prescribed environmental matter** is any species, ecosystem or other similar matter protected under Queensland legislation for which an **offset** may be provided. A **prescribed environmental matter** may be a matter of national, state or local environmental significance, however, assessment criteria in the State Development Assessment Provisions only relate to **matters of state environmental significance**. Each of the **prescribed environmental matters** are listed under the Environmental Offsets Regulation 2014.

#### Significant residual impact see the Environmental offsets Act 2014.

Note: Significant residual impact is an impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that:

- 1. remains, or will or is likely to remain, (whether temporarily or permanently) despite on-site mitigation measures for the prescribed activity
- 2. is, or will or is likely to be, significant.

Guidance for determining if a prescribed activity will have a **significant residual impact** on a **matter of state environmental significance** is provided in the Significant Residual Impact Guideline, Department State Development, Infrastructure and Planning, 2014.

#### Strategic environmental area see the Regional Planning Interests Act 2014.

Note: A **strategic environmental area** is an area that:

- 1. contains one or more environmental attributes for the area
- 2. is either:
  - a. shown on a map in a regional plan as a strategic environmental area; or
  - b. prescribed under a regulation.

#### Tidal land see the Fisheries Act 1994.

Note: Tidal land includes reefs, shoals and other land permanently or periodically submerged by waters subject to tidal influence.

#### Waterway see the Fisheries Act 1994.

Note: Waterway includes a river, creek, stream, watercourse or inlet of the sea. For further guidance see the fact sheet Maintaining Fish Passage in Queensland: What is a waterway? Department of Agriculture, Fisheries and Forestry, 2014.

#### Waterway barrier works see the Fisheries Act 1994.

Note: Waterway barrier works means a dam, weir, or other barrier across a waterway if the barrier limits fish stock access and movement along a waterway. For further guidance see the factsheets Maintaining Fish Passage in Queensland: What is a waterway barrier work?, Department of Agriculture, Fisheries and Forestry, 2014 and Maintaining Fish Passage in Queensland: What is not a waterway barrier work?, Department of Agriculture, Fisheries and Forestry, 2014.

## 18.5 Abbreviations

ARI – Average Recurrence Interval

## State code 19: Category 3 levees

## 19.1 Purpose statement

The purpose of this code is to ensure the community's **resilience** to the impacts of flood events, **levee** failure, or **levee** overtopping is maintained or enhanced by the **category 3 levee**.

Note: Further information on category 3 levees and guidance on how to demonstrate compliance with the provisions of this code is provided in the current version of the guidance document called Guidelines for the construction or modification of category 2 and 3 levees, available on DNRME's website.

## 19.2 Performance outcomes and acceptable outcomes

Development that is operational work for a **category 3 levee** should demonstrate compliance with the relevant provisions in table 19.2.1.

Table 19.2.1 Operational work for a category 3 levee

Performance outcomes	Acceptable outcomes
PO1 People and properties impacted by the category 3 levee have been made aware of the benefits and impacts created by the development.	AO1.1 A vulnerability and tolerability assessment report is provided.
	AND
	<b>AO1.2</b> A report identifying the benefits and impacts to people and property under pre and post <b>category 3 levee</b> conditions across a range of flood event scenarios is provided.
	Note: The range of flood event scenarios addressed in the report should include all the following:  1. 10, 20, 30, 40, 50 and 100 year average recurrence interval (ARI) design events  2. design flood event  3. an overtopping scenario that will result in the largest impact on people and properties as a result of the category 3 levee's construction.
<b>PO2</b> Appropriate disaster management processes are in place to maintain or enhance the <b>resilience</b> of the community in the event of <b>levee</b> failure or	<b>AO2.1</b> A <b>levee</b> operations and maintenance manual is provided.
overtopping.	Note: It is recommended that a Registered Professional Engineer of Queensland (RPEQ) prepare the operations and maintenance manual.
	AND
	AO2.2 The emergency action plan in the Local Government's Local Disaster Management Plan is updated to reflect changes as a result of the category 3 levee.

## 19.3 Reference documents

Department of Natural Resources and Mines 2014, Guidelines for the construction and modification of levees

## 19.4 Glossary of terms

#### Category 3 levee see the Water Regulation 2016.

Note: Category 3 levee means a levee that has off-property impacts and affects three or more impacted people.

Levee see schedule 4 of the Water Act 2000.

Note: Levee means an artificial embankment or structure which prevents or reduces the flow of overland flow water onto or from land. A levee includes levee-related infrastructure.

**Resilience** means the ability to adapt to changing conditions and prepare for, withstand and rapidly recover from disruption.

### 19.5 Abbreviations

RPEQ - Registered Professional Engineer of Queensland

ARI - Average Recurrence Interval

## State code 20: Referable dams

## 20.1 Purpose statement

The purpose of this code is to reduce the risk to the community from the failure or other impacts of **referable dams** by ensuring appropriate safety standards are utilised in the design, construction, management and maintenance of dams.

Note: Further information regarding **referable dams**, and guidance on how to demonstrate compliance with the performance outcomes of this state code, is available in the Referable Dams Planning Guidance Material, Department of Energy and Water Supply, 2016.

## 20.2 Performance outcomes and acceptable outcomes

Development that is operational work for a **referable dam** should demonstrate compliance with the relevant provisions of table 20.2.1.

Table 20.2.1: Operational work

Table 20.2.1. Operational work		
Performance outcomes	Acceptable outcomes	
PO1 The dam is designed and constructed in a	No acceptable outcome is prescribed.	
manner which:		
is in accordance with appropriate dam		
engineering practices and standards		
minimises the potential for dam failure		
3. minimises any of the impacts resulting from a		
failure of the dam		
4. is appropriate for the site conditions where the		
dam is located.		
PO2 The dam will be managed and maintained in a	No acceptable outcome is prescribed.	
manner which:		
is in accordance with appropriate dam		
engineering practices and standards		
2. ensures the ongoing safe operation of the dam		
minimises the risk of dam failure		
4. is appropriate for the site conditions where the		
dam is located.		

### 20.3 Reference documents

Department of Energy and Water Supply 2017, Guidance on referable dams planning

## 20.4 Glossary of terms

**Referable dam** means any dam which has been failure impact assessed under the *Water Supply (Safety and Reliability) Act 2008*, and which has been accepted by the chief executive administering the *Water Supply (Safety and Reliability) Act 2008* as having either a category 1 or category 2 failure impact rating.

Note: Please refer to the Referable Dams Planning Guidance Material and/or the Water Supply (Safety and Reliability) Act 2008 for further information on when a dam is required to be failure impact assessed, and the process associated with failure impact assessment.

# State code 21: Hazardous chemical facilities

## 21.1 Purpose statement

The purpose of this code is to ensure that, so far as is reasonably practicable:

- 1. any off-site physical or chemical hazards and risks associated with a **hazardous chemical facility** are identified and managed appropriately in order to protect human health and safety, proportionate to the sensitivity of the surrounding land uses and zones
- 2. the design and siting of a **hazardous chemical facility** provides adequate protection from the harmful effects of:
  - a. an off-site hazard scenario at an existing hazardous chemical facility
  - b. any **natural hazards** applicable for the location.

Note: Further information regarding **hazardous chemical facilities**, and guidance on how to demonstrate compliance with the performance outcomes of this state code, is available in the Planning guideline – State code 21: Hazardous chemical facilities, Queensland Treasury, 2017.

## 21.2 Performance outcomes and acceptable outcomes

Development that is a material change of use for a **hazardous chemical facility** should demonstrate compliance with the relevant provisions of table 21.2.1.

Table 21.2.1: Material change of use

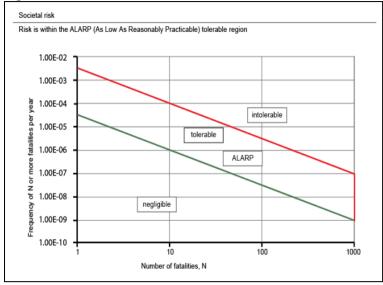
#### Acceptable outcomes **Performance outcomes** PO1 Any risk created by a hazardous chemical AO1.1 Any off-site impact from a hazard scenario shall not exceed, at the boundary of any vulnerable facility (including increasing an existing risk) is land use or zone: proportionate to the sensitivity of the surrounding land uses or zones. 1. a dangerous dose to human health; or 2. if the above criteria cannot be achieved: a. an individual fatality risk level of 0.5 x 10<sup>-6</sup>/year b. the societal risk criteria in figure 21.3.1. AND AO1.2 Any off-site impact from a hazard scenario shall not exceed, at the boundary of any sensitive land use or zone: 1. a dangerous dose to human health; or 2. if the above criteria cannot be achieved: a. an individual fatality risk level of 1 x b. the societal risk criteria in figure 21.3.1. AND AO1.3 Any off-site impact from a hazard scenario shall not exceed, at the boundary of any commercial or community activity land use or a dangerous dose to human health; or if the above criteria cannot be achieved:

Performance outcomes	Acceptable outcomes
PO2 The location and siting of a hazardous chemical facility considers and responds to any offsite effects from a hazard scenario at any existing hazardous chemical facility in the vicinity.  PO3 Storage and handling areas for fire risk hazardous chemicals are provided with control measures to identify a fire situation and trigger an emergency response.  PO4 Storage and handling areas for liquid or solid fire risk hazardous chemicals are provided with a spill containment system which:  1. has a working volume capable of containing any reasonably foreseeable spill or leak within the boundaries of the development, including any resultant effluent generated in response to an emergency  2. ensures that any prescribed hazardous chemicals that, if in contact with each other, may react to produce a fire, explosion or other harmful reaction, or a flammable, toxic or corrosive vapour, are not brought together.	a. an individual fatality risk level of 5 x 10-6/year b. the societal risk criteria in figure 21.3.1.  AND  AO1.4 Any off-site impact from a hazard scenario shall not exceed, at the boundary of any open space land use or zone: 1. a dangerous dose to human health; or 2. if the above criteria cannot be achieved: a. an individual fatality risk level of 10 x 10-6/year b. the societal risk criteria in figure 21.3.1.  AND  AO1.5 Any off-site impact from a hazard scenario shall not exceed, at the boundary of any industrial land use or zone: 1. a dangerous dose to the built environment; or 2. an individual fatality risk level of 50 x 10-6/year.  No acceptable outcome is prescribed.  AO3.1 Storage and handling areas for fire risk hazardous chemicals are provided with a 24 hour monitored fire detection system that has the ability to detect a fire in its early stages and notify an emergency responder at all times.  AO4.1 Storage and handling areas for packages of liquid or solid fire risk hazardous chemicals are provided with a spill containment system with a working volume capable of containing a minimum of 100 percent of all packages (prescribed hazardous chemicals and/or non-hazardous chemicals) within the area plus the output of any fixed firefighting system provided for the area over a minimum of 90 minutes.  AND  AO4.2 Storage and handling areas for liquid or solid fire risk hazardous chemicals in tanks are provided with a spill containment system with a working volume capable of containing a minimum of:
<ol> <li>fire risk hazardous chemicals are provided with a spill containment system which:</li> <li>has a working volume capable of containing any reasonably foreseeable spill or leak within the boundaries of the development, including any resultant effluent generated in response to an emergency</li> <li>ensures that any prescribed hazardous chemicals that, if in contact with each other, may react to produce a fire, explosion or other harmful reaction, or a flammable, toxic or</li> </ol>	AO4.1 Storage and handling areas for packages of liquid or solid fire risk hazardous chemicals are provided with a spill containment system with a working volume capable of containing a minimum of 100 percent of all packages (prescribed hazardous chemicals and/or non-hazardous chemicals) within the area plus the output of any fixed firefighting system provided for the area over a minimum of 90 minutes.  AND  AO4.2 Storage and handling areas for liquid or solid fire risk hazardous chemicals in tanks are

Performance outcomes	Acceptable outcomes		
	AO4.3 The hazardous chemical facility does not		
	store or handle any prescribed hazardous		
	chemicals that, if in contact with each other, may		
	react to produce a fire, explosion or other harmful		
	reaction, or a flammable, toxic or corrosive vapour.		
PO5 The hazardous chemical facility is located	AO5.1 Storage and handling areas are located		
and/or designed to minimise any adverse	outside of:		
consequence of:	1. a flood hazard area		
1. flood	2. a bushfire prone area		
2. bushfire	3. an erosion prone area or storm tide		
erosion or storm tide inundation	inundation area		
4. landslide	4. a landslide hazard area.		
on a storage and handling area.			
PO6 The hazardous chemical facility is located	No acceptable outcome is prescribed.		
and/or designed to minimise any adverse			
consequence of a natural hazard such as an			
earthquake or wind action on a storage and			
handling area.			

## 21.3 Figures

Figure 21.3.1: Societal risk criteria



## 21.4 Reference documents

Queensland Treasury 2017, Planning guideline - State code 21: Hazardous chemical facilities

## 21.5 Glossary of terms

**AEGL** means Acute Exposure Guidelines Level which identifies threshold exposure limits for the general public and are applicable to emergency exposure periods ranging from 10 minutes to eight hours as published by the United States Environmental Protection Agency.

**AEGL-2** means the airborne concentration (expressed as ppm or mg/m3) of a substance above which it is predicted the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

**Bushfire prone area** see glossary in the State Planning Policy. Note: **Bushfire prone area** means an area that is:

- 1. shown on the State Planning Policy interactive mapping system as a bushfire prone area; or
- 2. identified by a local government in its planning scheme as a **bushfire prone area**, based on a localised bushfire study, prepared by a suitably qualified person.

## **Commercial or community activity land use** means any of the following as defined in the Planning Regulation 2017:

- 1. shopping centre
- 2. shop
- 3. office
- 4. major sport, recreation and entertainment facility
- 5. market
- 6. showroom
- 7. tourist attraction
- 8. entertainment facility
- 9. place of worship
- 10. community use
- 11. theatre

#### Dangerous dose to human health means:

- 1. for fire or explosion an effect that equals or exceeds the following:
  - a. 4.7 kilowatts per square metre for heat radiation; or
  - b. 7 kilopascals for explosion overpressure
- 2. for toxic or corrosive gases an effect that equals or exceeds the following:
  - a. AEGL-2 (60 minutes); or
  - b. where a corresponding AEGL is not available ERPG-2; or
  - c. where a corresponding **ERGP-2** is not available a concentration that is likely to produce the following effects:
    - i.severe distress to almost all people; or
    - ii.a substantial proportion of people require medical attention; or
    - iii.some people are seriously injured, requiring prolonged treatment; or
    - iv. highly susceptible people might be fatally injured.

## **Dangerous dose to the built environment** means an effect from fire or explosion that equals or exceeds the following:

- 1. 12.6 kilowatts per square metre for heat radiation; or
- 2. 14 kilopascals for explosion overpressure.

**Emergency responder** means a person capable of assessing the severity of an emergency situation and providing a response or requesting assistance.

Note: An **emergency responder** includes a person employed by or on behalf of a **hazardous chemical facility** or Queensland Fire and Emergency Services.

**Erosion prone area** means an area declared to be an erosion prone area under section 70(1) of the *Coastal Protection and Management Act 1995.* 

Note: **Erosion prone areas** are identified in accordance with the methodology set out in the Coastal hazard technical guide, Department of Environment and Heritage Protection, 2013 and use the following factors to account for the projected impacts of climate change by the year 2100:

- 1. a sea level rise factor of 0.8 metres
- 2. an increase in the maximum cyclone intensity by 10 percent.

**ERPG** means the Emergency Response Planning Guidelines developed by the American Industrial Hygiene Association and includes **ERPG-2**.

**ERPG-2** means the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action.

Fire risk hazardous chemical see schedule 19 of the Work Health and Safety Regulation 2011.

Note: Fire risk hazardous chemical means a prescribed hazardous chemical that:

- 1. is any of the following:
  - a. a flammable gas
  - b. a flammable liquid (hazard category 1 to 3)
  - c. a flammable solid

- d. a substance liable to spontaneous combustion
- e. a substance which, in contact with water, emits flammable gases
- f. an oxidizing substance
- g. an organic peroxide
- 2. burns readily or supports combustion.

**Fixed firefighting system** means any water-supplying engineering control such as a drencher system, sprinkler system, foam making system, cooling ring, fire hydrant, hydrant monitor or hose reel that has been installed for a prescribed hazardous chemical storage and handling area for the purposes of mitigating fire hazards associated with that area. It does not include any fixed or portable firefighting system located outside the boundaries of the development.

#### Flood hazard area see glossary in the State Planning Policy 2017.

Note: Flood hazard area means an area that is:

- 1. shown on the State Planning Policy interactive mapping system as a flood hazard area; or
- identified by a local government in its planning scheme as a flood hazard area, based on a localised flood study that is prepared by a suitably qualified person using the revised climate change factor for increased rainfall intensity in the Australian Rainfall and Runoff projections.

**Hazard scenario** means a reasonably foreseeable scenario involving **prescribed hazardous chemicals** resulting in an uncontrolled fire or explosion, or release of corrosive or toxic vapours, dusts or gases from the development.

#### Hazardous chemical facility see the Planning Regulation 2017.

Note: **Hazardous chemical facility** means the use of premises for a facility at which a **prescribed hazardous chemical** is present or likely to be present in a quantity that exceeds 10 percent of the chemical's threshold quantity under schedule 15 of the Work Health and Safety Regulation 2011.

Individual fatality risk level means the risk of death to a person at a particular point.

#### Industrial activity see the Planning Regulation 2017.

Note: Industrial land use means any of the following:

- 1. a warehouse
- 2. a low impact industry
- 3. a medium impact industry
- 4. a high impact industry
- a special industry
- an extractive industry
- 7. a marine industry
- 8. a research and technology industry
- 9. a service industry

#### Landslide hazard area see glossary in the State Planning Policy.

Note: Landslide hazard area means an area that is:

- identified by a local government in its planning scheme as a landslide hazard area, based on a localised landslide study prepared by a suitably qualified person; or
- if the local government has not identified landslide hazard areas in its planning scheme in accordance with point 1 above land with a slope greater than or equal to 15 percent.

#### Natural hazard see glossary in the State Planning Policy.

Note: **Natural hazard** means a naturally occurring situation or condition, such as a flood, bushfire, landslide, coastal erosion or storm-tide inundation, with the potential for loss or harm to the community, property or environment.

#### Open space land use means any of the following as defined in the Planning Regulation 2017:

- 1. outdoor sport and recreation (not including sporting stadiums)
- 2. park
- environment facility
- 4. rural industry.

**Package** means a transportable container designed to contain a **prescribed hazardous chemical** that has a water capacity:

- 1. not exceeding 500 litres; or
- 2. exceeding 500 litres and is an intermediate bulk container (IBC) as defined by the ADG Code.

**Placard quantity** means a **placard quantity** for a **prescribed hazardous chemical** or group of **prescribed hazardous chemicals** as per schedule 11 of the Work Health and Safety Regulation 2011.

#### Prescribed hazardous chemical means any of the following:

- 1. a chemical listed in schedule 11 of the Work Health Safety Regulation 2011; or
- a chemical classified as explosives under the ADG Code or GHS; or
- 3. a chemical classified as hazardous to the aquatic environment under the ADG Code or GHS.

#### Reasonably practicable see section 18 of the Work Health and Safety Act 2011.

Note: **Reasonably practicable**, in relation to a duty to ensure health and safety, means that which is, or was at a particular time, reasonably able to be done in relation to ensuring health and safety, taking into account and weighing up all relevant matters including:

- 1. the likelihood of the hazard or the risk concerned occurring
- 2. the degree of harm that might result from the hazard or the risk
- 3. what the person concerned knows, or ought reasonably to know, about:
  - a. the hazard or the risk
  - b. ways of eliminating or minimising the risk
- 4. the availability and suitability of ways to eliminate or minimise the risk
- after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.

#### Sensitive land use means any of the following as defined in the Planning Regulation 2017:

- 1. community residence
- 2. dual occupancy
- 3. dwelling house
- 4. educational establishment
- multiple dwelling
- 6. relocatable home park
- 7. residential care facility
- rooming accommodation
- 9. short-term accommodation
- 10. tourist park.

**Storage and/or handling** means storing, processing, generating, using, transferring or unloading activities, but does not include transporting **prescribed hazardous chemicals** by road, rail, sea or air if the transport is regulated under the:

- 1. Explosive Act 1999; or
- 2. Transport Operations (Marine Safety) Act 1994; or
- 3. Transport Operations (Road Use Management) Act 1995; or
- 4. Transport (Rail Safety) Act 2010.

Storage and handling area means any area designed for the storage and/or handling of a particular prescribed hazardous chemical or group of prescribed hazardous chemicals in a quantity that exceeds a placard quantity and includes any separation distances, barriers and spill containment systems required to adequately isolate the area.

Note: Multiple storage and handling areas located within a development's boundaries may be considered individual storage and handling areas where, after taking account of the chemical(s) within the area, each area is adequately isolated and provided with a self-contained spill compound. For example, where a storage and handling area for flammable liquids in packages and a storage and handling area for corrosive substances in tanks are located within the same facility, each area may be considered a separate storage and handling area provided it is appropriately isolated from the other and provided with a self-contained spill compound. However, if an area contained packages and/or tanks of flammable liquids, toxic liquids and corrosive solids all within the same spill compound; such an area is to be considered a single storage and handling area.

#### Storm tide inundation area see glossary in the State Planning Policy.

Note: Storm tide inundation area means the area of land determined to be inundated during a defined storm tide event that is:

- 1. identified by a local government in its planning scheme as a **storm tide inundation area**, on the basis of a localised study prepared by a suitably qualified person; or
- if the local government has not identified storm tide inundation areas in its planning scheme in accordance with paragraph 1
  above; identified on the SPP interactive mapping system as a storm tide inundation area.

**Tank** means any container (e.g. tank, vessel or drum) designed to contain a **prescribed hazardous chemical** that has a water capacity exceeding 500 litres, however, does not include an intermediate bulk container (IBC) as defined by the ADG Code.

Vulnerable land use means any of the following as defined in the Planning Regulation 2017:

- 1. childcare centre
- 2. community care centre

- 3. educational establishment
- 4. health care service
- 5. hospital
- 6. retirement facility.

**Wind action** means the influences of site wind speeds, design wind speeds, design wind pressures and distributed forces as described in the Australian and New Zealand Standard AS/NZS1170.2: Structural design actions: Part 2, Wind actions.

## 21.6 Abbreviations

**ADG Code** – Australian code for the transport of dangerous goods by road and rail as published by the National Transport Commission

AEGL - Acute Exposure Guidelines Level

**ERPG** – Emergency Response Planning Guidelines

GHS - Globally Harmonised Classification System as referenced in the Work Health and Safety Regulation 2011

## State code 22: Environmentally relevant activities

## 22.1 Purpose statement

The purpose of the code is to ensure that environmentally relevant activities (ERAs):

- 1. are located and designed to avoid or mitigate **environmental harm** on **environmental values** of the natural **environment**, adjacent **sensitive land uses** and sensitive receptors
- avoid impacts on matters of state environmental significance, and where avoidance is not reasonably possible, minimise and mitigate impacts, and provide an offset for significant residual impacts where appropriate.

Note: Guidance on achieving compliance with the performance outcomes in the code, as well as on the broader assessment process for **ERAs**, is provided in the Guideline – SDAP State Code 22: ERAs, Department of Environment and Heritage Protection, 2017. Guidance for determining if the **ERA** will have a **significant residual impact** on a **matter of state environmental significance** is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014.

## 22.2 Performance outcomes and acceptable outcomes

Development that is a material change of use for an **ERA** should demonstrate compliance with the relevant provisions of table 22.2.2. For further details of the specific performance outcomes to be addressed, please refer to table 22.2.1.

Table 22.2.1: ERA applicable criteria for activity

Development	Relevant provisions of code
All ERAs	Table 22.2.2 – PO1 – PO6
All development – matters of state environmental significance	Table 22.2.2 – PO7
Category C areas and category R areas of vegetation	Table 22.2.2 – PO8
Intensive animal industry – poultry farming (ERA 4(2))	Table 22.2.2 – PO1, PO2, PO4 – PO6, PO9

Table 22.2.2: Material change of use

Performance outcomes	Acceptable outcomes
All ERAs	
<b>PO1</b> Development is suitably located and designed to avoid or mitigate <b>environmental harm</b> to the acoustic <b>environment</b> .	AO1.1 Development meets the acoustic quality objectives for sensitive receptors identified in the Environmental Protection (Noise) Policy 2008.
<b>PO2</b> Development is suitably located and designed to avoid or mitigate <b>environmental harm</b> to the air <b>environment</b> .	<b>AO2.1</b> Development meets the air quality objectives of the Environmental Protection (Air) Policy 2008.
PO3 Development, other than intensive animal industry for poultry farming, is suitably located and designed to avoid or mitigate environmental harm on adjacent sensitive land uses caused by odour.	No acceptable outcome is prescribed.
PO4 Development is suitably located and designed to avoid or mitigate environmental harm to the receiving waters environment.  PO5 Development is designed to include elements which:	AO4.1 Development meets the management intent, water quality guidelines and objectives of the Environmental Protection (Water) Policy 2009.  No acceptable outcome is prescribed.

D-	who will have been a suite a man	Associable suiteemes
_	rformance outcomes	Acceptable outcomes
1.	prevent or minimise the production of	
	hazardous contaminants and waste as by-	
2	products; or	
2.		
	site rather than releasing them into the	
_	environment; and	
3.	provide secondary containment to prevent the	
	accidental release of hazardous contaminants	
	to the <b>environment</b> from spillage or leaks.	
	6 Environmentally hazardous materials	No acceptable outcome is prescribed.
	ated on-site are stored to avoid or minimise their	
	ease into the <b>environment</b> due to inundation	
	ring flood events.	
	development – matters of state environmental	
	7 Development:	No acceptable outcome is prescribed.
1.	avoids impacts on matters of state	
	environmental significance; or	
2.	minimises and mitigates impacts on matters of	
	state environmental significance after	
	demonstrating avoidance is not reasonably	
	possible; and	
3.	provides an <b>offset</b> if, after demonstrating all	
	reasonable avoidance, minimisation and	
	mitigation measures are undertaken, the	
	development results in an acceptable	
	significant residual impact on a matter of	
	state environmental significance.	
app Cor	tutory note: For Brisbane core port land, an offset may only be lied to development on land identified as E1 iservation/Buffer, E2 Open Space or Buffer/Investigation in the sbane Port LUP precinct plan. For the Brisbane Port LUP, see	
	w.portbris.com.au	
sigi sigi Gui Plai con env	e: Guidance for determining if the development will have a nificant residual impact on a matter of state environmental nificance is provided in the Significant Residual Impact deline, Department of State Development, Infrastructure and nning, 2014. Where the significant residual impact is sidered an acceptable impact on the matter of state rironmental significance and an offset is considered ropriate, the offset should be delivered in accordance with the	
	vironmental Offsets Act 2014.	
	tegory C areas and category R areas of vegetati	
PO	8 Development:	No acceptable outcome is prescribed.
1.	, , ,	
	vegetation and category R areas of vegetation;	
	or	
2.	minimises and mitigates impacts on category C	
	areas and category R areas of vegetation after	
	demonstrating avoidance is not reasonably	
	possible.	
	ensive animal industry – poultry farming (ERA 4	
	9 Poultry farming development (where farming	<b>A09.1</b> For poultry farming involving 300,000 birds or
	re than 200,000 birds) is suitably located and	less, development meets the separation distances
	signed to avoid or mitigate environmental harm	as determined using the S-factor methodology to:
on	adjacent <b>sensitive land uses</b> caused by odour.	1. a sensitive land use in a rural zone; and
		2. boundary of a non-rural zone.
		OR
1		

Performance outcomes	Acceptable outcomes
	<ul> <li>AO9.2 Development meets the separation distances as determined by odour modelling using the following criteria:</li> <li>1. 2.5 odour units, 99.5 percent, 1 hour average for a sensitive land use in a rural zone; or</li> <li>2. 1.0 odour units, 99.5 percent, 1 hour average for the boundary of a non-rural zone.</li> </ul>
	Statutory note: Guidance for determining if the development will cause <b>environmental harm</b> caused by odour is provided in the Development of Meat Chicken Farms in Queensland, Department of Agriculture and Fisheries, 2016 and the Guideline – Odour Impact Assessment from Developments, Department of Environment and Heritage Protection, 2013.

### 22.3 Reference documents

Department of Agriculture and Fisheries 2016, Development of Meat Chicken Farms in Queensland

Department of Environment and Heritage Protection 2016, Environmental offsets framework documents

Department of Environment and Heritage Protection 2013, Guideline – Odour Impact Assessment from Developments

Department of Environment and Heritage Protection 2017, Guideline – SDAP State code 22: Environmentally Relevant Activities

Department of State Development, Infrastructure and Planning 2014, Significant Residual Impact Guideline

Queensland Government 2008, Environmental Protection (Air) Policy 2008

Queensland Government 2008, Environmental Protection (Noise) Policy 2008

Queensland Government 2009, Environmental Protection (Water) Policy 2009

## 22.4 Glossary of terms

**Category C areas** means areas of high value regrowth vegetation classed as 'endangered' or 'of concern' under the *Vegetation Management Act 1999* that are shown on the regulated vegetation management map as category C areas.

**Category** R **areas** means regrowth watercourse and drainage feature areas under the *Vegetation Management Act 1999* that are shown on the regulated vegetation management map as category R areas.

#### **Environment** includes:

- 1. ecosystems and their constituent parts, including people and communities
- 2. all natural and physical resources
- 3. the qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community
- 4. the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs 1 to 3.

#### Environmental harm see the Environmental Protection Act 1994.

Note: **Environmental harm** is defined as any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an **environmental value**, and includes **environmental** nuisance.

**Environmentally hazardous material** means **hazardous contaminants** as well as any bulk material which can detrimentally impact on the **environmental values** if released into the **environment**.

Note: Common examples of environmentally hazardous materials are compost and mulch, tailings and effluent from intensive animal industries.

**Environmentally relevant activity (ERA)** means a concurrence ERA listed in schedule 2 of the Environmental Protection Regulation 2008 with a capital 'C' in column 3 (excluding mobile or temporary ERAs and ERAs devolved to local authorities by section 101 of the Environmental Protection Regulation 2008).

#### Environmental value see the Environment Protection Act 1994.

Note: Environmental values are:

- 1. a quality or physical characteristic of the **environment** that is conducive to ecological health or public amenity or safety; or
- another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation. Relevant environmental protection policies (EPP) are EPP (Noise), EPP (Air) and EPP (Water).

#### Hazardous contaminant see the Environmental Protection Act 1994.

Note: **Hazardous contaminant** means a contaminant, other than an item of explosive ordnance that, if improperly treated, stored, disposed of or otherwise managed, is likely to cause serious or material **environmental harm** because of:

- 1. its quantity, concentration, acute or chronic toxic effects, carcinogenicity, teratogenicity, mutagenicity, corrosiveness, explosiveness, radioactivity or flammability; or
- its physical, chemical or infectious characteristics.

#### Intensive animal industry see schedule 24 of the Planning Regulation 2017.

Note: Intensive animal industry means:

- 1. the use of premises for:
  - a. the intensive production of animals or animal products, in an enclosure, that requires food and water to be provided mechanically or by hand; or
  - b. storing and packing feed and produce, if the use is ancillary to the use in subparagraph a; but
  - 2. does not include the cultivation of aquatic animals.

Examples include feedlot, piggery, poultry and egg production.

Matters of state environmental significance see schedule 2 of the Environmental Offsets Regulation 2014. Note: Matters of state environmental significance are prescribed environmental matters under the Environmental Offsets Regulation 2014 that require an offset when a prescribed activity will have a significant residual impact on the matter. A matter of state environmental significance is any of the following matters:

- 1. regional ecosystems under the Vegetation Management Act 1999 that:
  - a. are endangered regional ecosystems
  - b. are of concern regional ecosystems
  - c. intersect with a **wetland** shown on the vegetation management wetlands map
  - d. contain areas of essential habitat shown on the essential habitat map for an animal that is endangered wildlife or vulnerable wildlife or a plant that is endangered wildlife or vulnerable wildlife
  - e. are located within the defined distances stated in the Environmental Offsets Policy, Department of Environment and Heritage Protection, 2014 from the defining banks of a relevant watercourse or drainage feature as shown on the vegetation management watercourse and drainage feature map; or
  - f. are areas of land determined to be required for ecosystem functioning ('connectivity areas')
- wetlands in a wetland protection area or wetlands of high ecological significance shown on the map of referable wetlands under the Environmental Protection Regulation 2008
- wetlands and watercourses in high ecological value waters as defined in schedule 2 of the Environmental Protection (Water) Policy 2009
- designated precincts in strategic environmental areas under the Regional Planning Interests Regulation 2014
- threatened wildlife under the Nature Conservation Act 1992 and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006
- 6. protected areas under the Nature Conservation Act 1992, excluding coordinated conservation areas
- 7. highly protected zones of state marine parks under the Marine Parks Act 2004
- 8. declared fish habitat areas under the Fisheries Act 1994
- 9. waterways that provide for fish passage under the *Fisheries Act 1994* if the construction, installation or modification of waterway barrier works carried will limit the passage of fish along the waterway
- 10. marine plants under the Fisheries Act 1994; or
- 11. legally secured offset areas.

#### Offset means environmental offset under the Environmental Offsets Act 2014.

Note: Environmental **offset** means an activity undertaken to counterbalance a **significant residual impact** of a prescribed activity on a **prescribed environmental matter**, delivered in accordance with the Environmental **offsets** framework, Department of Environment and Heritage Protection, 2016. The **prescribed environmental matters** assessed under the State Development Assessment Provisions are **matters of state environmental significance**.

**Odour unit (ou)** means that concentration of odorant(s) at standard conditions that elicits a physiological response from a panel (detection threshold) equivalent to that elicited by one **Reference Odour Mass**, evaporated in one cubic metre of neutral gas at standard conditions.

Poultry farming see schedule 2 of the Environmental Protection Regulation 2008.

Note: Poultry farming consists of farming a total of more than 1000 birds for:

- 1. producing eggs or fertile eggs
- 2. rearing hatchlings, starter pullets or layers; or
- 3. rearing birds for meat.

#### Prescribed environmental matters see the Environmental Offsets Act 2014.

Note: A **prescribed environmental matter** is any species, ecosystem or other similar matter protected under Queensland legislation for which an **offset** may be provided. A **prescribed environmental matter** may be a matter of national, state or local **environmental** significance, however, assessment criteria in the State Development Assessment Provisions only relate to **matters of state environmental significance**. Each of the **prescribed environmental matters** are listed under the Environmental Offsets Regulation 2014.

**Reference odour mass** means the acceptable reference value for the odour unit, equal to a defined mass of a certified reference material. One reference odour mass is equivalent to 132 µg n-butanol which evaporated in 1 cubic metre of neutral gas at standard conditions produces a concentration of 40 ppb (µmol/mol).

Sensitive land uses see schedule 24 of the Planning Regulation 2017.

Note: Sensitive land uses means:

- 1. caretaker's accommodation; or
- a childcare centre; or
- 3. a community residence; or
- 4. a detention facility; or
- 5. a dual occupancy; or
- 6. a dwelling house; or
- 7. a dwelling unit; or
- 8. an educational establishment; or
- 9. a health care service; or
- 10. a hospital; or
- 11. a hotel, to the extent the hotel provides accommodation for tourists or travellers; or
- 12. a multiple dwelling; or
- 13. non-resident workforce accommodation; or
- 14. a relocatable home park; or
- 15. a residential care facility; or
- 16. a resort complex; or
- 17. a retirement facility; or
- 18. rooming accommodation; or
- 19. rural workers' accommodation; or
- 20. short-term accommodation; or
- 21. a tourist park.

**Sensitive receptor** means an area or place where noise is measured as defined by schedule 1 of the Environmental Protection Policy (Noise) 2008.

#### Serious environmental harm see the Environmental Protection Act 1994.

Note: Serious environmental harm is environmental harm (other than environmental nuisance):

- 1. that is irreversible, of a high impact or widespread
- 2. caused to an area of high conservation value or special significance
- that causes actual or potential loss or damage to property of an amount of, or amounts totalling, more than the threshold amount;
- 4. that results in costs of more than the threshold amount being incurred in taking appropriate action to:
  - a. prevent or minimise the harm
  - b. rehabilitate or restore the **environment** to its condition before the harm.

#### Significant residual impact see the Environmental Offsets Act 2014.

Note: Significant residual impact is an impact, whether direct or indirect, of a prescribed activity on all or part of a prescribed environmental matter that:

- remains, or will or is likely to remain, (whether temporarily or permanently) despite on-site mitigation measures for the
  prescribed activity
- 2. is, or will or is likely to be, significant.

Guidance for determining if a prescribed activity will have a **significant residual impact** on a **matter of state environmental significance** is provided in the Significant Residual Impact Guideline, Department of State Development, Infrastructure and Planning, 2014

**Wetland** means an area shown as a wetland on the map of referable wetlands as defined by the Environmental Protection Regulation 2008.

#### Waste see the Environmental Protection Act 1994.

Note: Waste includes anything, other than a resource approved under chapter 8 of the Waste Reduction and Recycling Act 2011, that is:

1. 2.	left over, or an unwanted by-product, from an industrial, commercial, domestic or other activity; or surplus to the industrial, commercial, domestic or other activity generating the <b>waste</b> .

## State code 23: Wind farm development

## 23.1 Purpose statement

The purpose of the code is to protect individuals, communities and the environment from adverse impacts as a result of the construction, operation and **decommissioning** of **wind farm** development.

Wind farms should be appropriately located, sited, designed and operated to ensure:

- 1. the safety, operational integrity and efficiency of air services and aircraft operations
- 2. risks to human health, wellbeing and quality of life are minimised by ensuring acceptable levels of amenity and acoustic emissions at **sensitive land uses**
- 3. development avoids, or minimises and mitigates, adverse impacts on the natural environment (fauna and flora) and associated ecological processes
- 4. development does not unreasonably impact on the character, **scenic amenity** and **landscape values** of the locality
- 5. the safe and efficient operation of local transport networks and road infrastructure.

Note: Guidance on how to demonstrate compliance with the performance outcomes and acceptable solutions of this state code are available in the State Development Assessment Provisions Guideline – State code 23: Wind farm development.

## 23.2 Performance outcomes and acceptable outcomes

Development that is a material change of use for a **wind farm** should demonstrate compliance with the relevant provisions of table 23.1.1.

#### Table 23.2.1: Material change of use

#### **Performance outcomes Acceptable outcomes** Aviation safety, integrity and efficiency PO1 The safety, operational integrity and efficiency **AO1.1 Wind turbines** or wind monitoring towers of air services and aircraft operations are not are 150 metres or less in height and do not infringe adversely affected by the location, siting, design and on the obstacle limitation surfaces (OLS). operation of the development. procedures for air navigation services - aircraft operations (PANS-OPS) surface, restricted airspace and low flying areas of a certified aerodrome, registered aerodrome or military aerodrome. OR AO1.2 For development involving wind turbines or wind monitoring towers more than 150 metres in 1. written endorsement by the Civil Aviation Safety Authority (CASA), Airservices Australia and the district aerodrome supervisor is provided stating they have no objection to the proposed development: or 2. where within 30 kilometres of a military aerodrome, or a certified aerodrome or registered aerodrome jointly used as a military aerodrome, written endorsement by the federal Department of Defence, Civil Aviation Safety Authority (CASA), Airservices Australia and the district aerodrome supervisor is provided stating

Performance outcomes	Acceptable outcomes
	they have no objection to the proposed development.
<b>PO2</b> Development includes lighting and marking measures to ensure the safety, operational integrity and efficiency of <b>air services</b> and aircraft operations.	AO2.1 Marking of wind turbines is provided so that rotor blades, the nacelle and the upper two thirds of the supporting mast of the wind turbines are painted white.
	AND
	AO2.2 The top one third of wind monitoring towers is painted in alternating bands of contrasting colour.
	AND
	AO2.3 For development involving the lighting of wind turbines or wind monitoring towers more than 150 metres in height or within 30 kilometres of a certified aerodrome or registered aerodrome, written endorsement by the Civil Aviation Safety Authority (CASA) and Airservices Australia is provided stating they have no objection to the proposed development and lighting measures.
	AND
	<ul> <li>AO2.4 In areas where low flying aircraft occur:</li> <li>1. marker balls or high visibility sleeves are placed on the outside guy wires of wind monitoring towers</li> <li>2. the guy wire ground attachment points have contrasting colours to the surrounding ground/vegetation</li> <li>3. a flashing strobe light is installed to operate on wind monitoring towers during daylight hours.</li> </ul>
	AND
	AO2.5 Where LED obstruction lighting is proposed, the frequency range of the LED light emitted falls within the range of wavelengths 655 to 930 nanometres.
Electromagnetic interference	
<b>PO3</b> Development is designed, located and sited to avoid, or minimise and mitigate, <b>electromagnetic interference</b> to pre-existing television, radar and radio transmission and reception.	No acceptable outcome is prescribed.
Shadow flicker	
PO4 Development avoids or minimises shadow flicker impacts on existing or approved sensitive land uses.	AO4.1 The modelled blade shadow flicker impact on any existing or approved sensitive land use(s) does not exceed 30 hours per annum and 30 minutes per day.
	AND
Elera and fauna	AO4.2 Wind turbine blades have a low reflectivity finish/treatment.
Flora and fauna	

Performance outcomes	Acceptable outcomes	
PO5 Development ensures that impacts on flora,	No acceptable outcome is prescribed.	
fauna and associated ecological processes are		
avoided, or minimised and mitigated, through		
effective siting, design and operation of the		
development.		
Traffic and access		
PO6 Development provides suitable vehicular	No acceptable outcome is prescribed.	
access, manoeuvring areas and parking for the		
ongoing operation and maintenance activities		
associated with the wind farm.		
Stormwater management		
PO7 Development avoids, or minimises and	No acceptable outcome is prescribed.	
mitigates, adverse impacts on water quality	·	
objectives to achieve no worsening to receiving		
waters during the operation of the <b>wind farm</b> .		
Watercourses and drainage features		
PO8 Development avoids or minimises the clearing	No acceptable outcome is prescribed.	
of vegetation within any watercourse or drainage	No acceptable outcome is prescribed.	
feature to protect:		
bank stability by protecting against bank erosion		
2. water quality objectives by filtering sediments,		
nutrients and other pollutants		
3. aquatic habitat		
terrestrial habitat.		
Character, scenic amenity and landscape values		
PO9 Development avoids, or minimises and	No acceptable outcome is prescribed.	
mitigates, adverse impacts on the character, scenic	·	
amenity and landscape values of the locality and		
region through effective siting and design		
region through effective siting and design.		
Separation distances	AO10 1 Wind turbings are enthack at least	
Separation distances PO10 Wind turbines are adequately separated	AO10.1 Wind turbines are setback at least	
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved sensitive	
Separation distances PO10 Wind turbines are adequately separated		
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved sensitive land uses on non-host lots.	
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved sensitive	
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved <b>sensitive</b> land uses on <b>non-host lots</b> .  OR	
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within	
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land	
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds	
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land	
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds	
Separation distances PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds of release) from all affected non-host lot owners	
PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on non-host lots.	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds of release) from all affected non-host lot owners	
PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on non-host lots.  Acoustic amenity – host lots	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds of release) from all affected non-host lot owners are provided accepting the reduced setback.	
PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on non-host lots.  Acoustic amenity – host lots PO11 The predicted acoustic level at all noise affected existing or approved sensitive land uses	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds of release) from all affected non-host lot owners are provided accepting the reduced setback.	
PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on non-host lots.  Acoustic amenity – host lots  PO11 The predicted acoustic level at all noise affected existing or approved sensitive land uses does not exceed the criteria stated in table 23.3.1.	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds of release) from all affected non-host lot owners are provided accepting the reduced setback.	
PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on non-host lots.  Acoustic amenity – host lots  PO11 The predicted acoustic level at all noise affected existing or approved sensitive land uses does not exceed the criteria stated in table 23.3.1.  Acoustic amenity – non-host lots	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds of release) from all affected non-host lot owners are provided accepting the reduced setback.  No acceptable outcome is prescribed.	
PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on non-host lots.  Acoustic amenity – host lots PO11 The predicted acoustic level at all noise affected existing or approved sensitive land uses does not exceed the criteria stated in table 23.3.1.  Acoustic amenity – non-host lots PO12 The predicted acoustic level at all noise	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds of release) from all affected non-host lot owners are provided accepting the reduced setback.	
PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on non-host lots.  Acoustic amenity – host lots PO11 The predicted acoustic level at all noise affected existing or approved sensitive land uses does not exceed the criteria stated in table 23.3.1.  Acoustic amenity – non-host lots PO12 The predicted acoustic level at all noise affected existing or approved sensitive land uses:	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds of release) from all affected non-host lot owners are provided accepting the reduced setback.  No acceptable outcome is prescribed.	
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PO10 Wind turbines are adequately separated from existing or approved sensitive land uses on non-host lots.  Acoustic amenity – host lots PO11 The predicted acoustic level at all noise affected existing or approved sensitive land uses does not exceed the criteria stated in table 23.3.1.  Acoustic amenity – non-host lots PO12 The predicted acoustic level at all noise affected existing or approved sensitive land uses: 1. does not exceed the criteria stated in table 23.3.2; or	1500 metres from existing or approved sensitive land uses on non-host lots.  OR  AO10.2 Where wind turbines are proposed within 1500 metres of existing or approved sensitive land uses on non-host lots, written agreements (deeds of release) from all affected non-host lot owners are provided accepting the reduced setback.  No acceptable outcome is prescribed.	
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Performance outcomes	Acceptable outcomes
uses does not exceed the criteria stated in	
table 23.3.1.  Construction management	
PO13 Construction activities associated with the	No acceptable outcome is prescribed.
development avoid, or minimise and mitigate,	
adverse impacts on environmental values, water	
quality objectives, amenity, local transport	
networks and road infrastructure.	

## 23.3 Reference tables

#### **Table 23.3.1**

Acoustic criteria	
Noise description	Acoustic level does not exceed
The outdoor (free-field) night-time (10pm to 6am) A-	1. 45dB(A); or
weighted equivalent acoustic level (LA <sub>eq</sub> ), assessed	2. the background noise (LA <sub>90</sub> ) by more than
at all noise affected existing or approved sensitive	5dB(A)
land uses.	whichever is the greater, for wind speed from cut-in
	to rated power of the <b>wind turbine</b> and each integer
	wind speed in between referenced to hub height.

#### **Table 23.3.2**

1 4510 201012	
Acoustic criteria	
Noise description	Acoustic level does not exceed
The outdoor (free-field) night-time (10pm to 6am) A-weighted equivalent acoustic level (LA <sub>eq</sub> ), assessed at all noise affected existing or approved <b>sensitive</b> land uses.	<ol> <li>35dB(A); or</li> <li>the background noise (LA<sub>90</sub>) by more than 5dB(A)</li> <li>whichever is the greater, for wind speed from cut-in to rated power of the wind turbine and each integer wind speed in between referenced to hub height.</li> </ol>
The outdoor (free-field) day-time (6am to 10pm) A-weighted equivalent acoustic level (LA <sub>eq</sub> ), assessed at all noise affected existing or approved <b>sensitive</b> land uses.	37dB(A); or     the background noise (LA90) by more than 5dB(A)     whichever is the greater, for wind speed from cut-in to rated power of the wind turbine and each integer wind speed in between referenced to hub height.

## 23.4 Reference documents

Department of Infrastructure, Local Government and Planning 2017, Wind farm state code planning guideline

## 23.5 Glossary of terms

Air services means the premises used for any of the following:

- 1. the arrival and departure of aircraft
- 2. the housing, servicing, refuelling, maintenance and repair of aircraft
- 3. the assembly and dispersal of passengers or goods on or from an aircraft
- 4. any ancillary activities directly serving the needs of passengers and visitors to the use
- 5. associated training and education facilities
- 6. aviation facilities.

Anemometers means a device used for measuring wind speed.

**Certified aerodrome** means a **certified aerodrome** as specified under part 139 of the Civil Aviation Safety Regulations 1998 (Cth).

Cut-in means the wind speed at which a wind turbine starts power production.

**Decommissioning** means that the **wind turbines**, site office and any other above-ground infrastructure is removed from the site, and roads, parking areas and foundation pads are covered and revegetated to return the ground to its former state.

Deed of release means a written agreement between proponent and landowner accepting the following:

- 1. a reduced setback between **wind turbines** and the landowner's existing or approved **sensitive land use(s)**; and/or
- 2. an increased acoustic level at the landowner's existing or approved noise affected **sensitive land use(s)**. Note: See section 45 of the *Property Law Act 1974* for the formal requirements for deeds executed by individuals.

**Drainage feature** means a natural landscape feature, including a gully, drain, drainage depression or other erosion feature that:

- 1. is formed by the concentration of, or operates to confine or concentrate, overland flow water during and immediately after rainfall events
- 2. flows for only a short duration after a rainfall event, regardless of the frequency of flow events
- 3. commonly, does not have enough continuing flow to create a riverine environment.

**Electromagnetic interference** means disturbance or degradation of telecommunications signals currently in operation over the land use area. Includes signals transmitted via microwave, very high frequency and ultrahigh frequency systems.

Environmental value see the Environmental Protection Act 1994.

Note: Environmental value is:

- 1. a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
- another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation.

**Ground level** means the level of the natural ground, or, where the level of the natural ground has been changed, the level as lawfully changed.

**Guy wire** means a tensioned cable designed to add stability to a free-standing structure, such as **wind turbines** and **wind monitoring towers**. One end of the **guy wire** is attached to the structure, and the other is anchored to the ground at some distance from the **mast** or tower base.

**Height** of a **wind turbine** means the maximum **height** reached by the tip of the turbine blades at their highest point above **ground level**.

Host lot means a parcel of land (lot(s)) that accommodates any part of a wind farm development.

**Hub height** of a **wind turbine** means the **height** of the hub measured from **ground level** (i.e. the **height** of the **wind turbine** without blades).

**Landscape values** means areas protected under a regional plan and/or local government planning scheme, such as biodiversity networks, natural economic resource areas (including rural production), **scenic amenity** areas and landscape heritage areas.

Low flying areas means a designated area where an aircraft can fly over:

- 1. any city, town or populous area at an elevation lower than 1 000 feet; or
- 2. any other area at an elevation lower than 500 feet.

Low reflectivity means a surface treatment that minimises glint.

Mast means the tower on which the wind turbine sits.

Military aerodrome means an aerodrome under the control of any part of the Defence Force.

**Nacelle** means the housing that sits on top of the tower and contains the main shaft and generator of the wind turbine.

Non-host lot see schedule 24 of the Planning Regulation 2017.

Note: Non-host lot means a lot no part of which is used for wind farm or part of a wind farm.

**Obstacle limitation surfaces (OLS)** means a series of surfaces that set the **height** limits of objects around an aerodrome, and is designed to provide protection for visual flying (when the pilot is flying by sight).

**Procedures for air navigation services – aircraft operations (PANS-OPS)** means a set of invisible surfaces above the ground around an airport. The **PANS-OPS** surface is generally above the **OLS** and is designed to safeguard an aircraft from collision with obstacles when the aircraft's flight may be guided solely by instruments, in conditions of poor visibility.

**Restricted airspace** means the airspace where aircraft movements are reduced to those with certain specified permissions. The Civil Aviation Safety Authority's Office of Airspace Regulation is responsible for **restricted airspace**.

**Registered aerodrome** means a **registered aerodrome** as specified under part 139 of the Civil Aviation Safety Regulations 1998 (Cth).

Rotor blades means the blades and hub of the wind turbine together.

**Scenic amenity** means a measure of the relative contribution of each place in the landscape to the collective appreciation of open space as viewed from places that are important to the public.

Sensitive land use see schedule 24 of the Planning Regulation 2017.

Note: Sensitive land use means any of the following as defined in the Planning Regulation 2017:

- 1. caretakers accommodation
- child care centre
- 3. community care centre
- 4. community residence
- 5. detention facility
- 6. dual occupancy
- 7. dwelling house
- 8. dwelling unit
- 9. educational establishment
- 10. health care services
- 11. hospital
- 12. hotel
- 13. multiple dwelling
- 14. non-resident workforce accommodation
- 15. relocatable home park
- 16. residential care facility
- 17. resort complex
- 18. retirement facility
- 19. rooming accommodation
- 20. rural workers' accommodation
- 21. short-term accommodation
- 22. tourist park.

**Shadow flicker** means a shadow that is cast under certain combinations of geographical position and time of day, when the sun passes behind the blades of a **wind turbine** and as the blades rotate, the shadow flicks on and off. The duration of this effect, which varies according to the time of the year, can be calculated from the machine geometry and the latitude of the site.

Watercourse see the schedule 4 of the Water Act 2000.

Note: A watercourse:

- 1. is a river, creek or other stream, including a stream in the form of an anabranch or a tributary, in which water flows permanently or intermittently, regardless of the frequency of flow events:
  - a. in a natural channel, whether artificially modified or not; or
  - b. in an artificial channel that has changed the course of the stream
  - a watercourse includes any of the following located in it:
    - a. in-stream islands
    - b. benches
    - c. bars
- 3. however, a watercourse does not include a drainage feature
- further:
  - a. unless there is a contrary intention, a reference to a **watercourse** in the *Water Act 2000*, other than in section 5 or in the definitions in schedule 4 to the extent they support the operation of section 5, is a reference to anywhere that is:
    - I. upstream of the downstream limit of the watercourse
    - II. between the lateral limits of the water course

b. a reference to the *Water Act 2000* to, or to a circumstance that involves, land adjoining a **watercourse**, is a reference to, or a circumstance that involves, and effectively adjoining a **watercourse**.

Water quality objectives means the numerical concentration limits, mass or volume limits per unit of time or narrative statements of indicators established for waters to enhance or protect the **environmental values** for those waters set out in:

- 1. schedule 1 of the Environmental Protection (Water) Policy 2009, for water mentioned in the policy; or
- 2. otherwise the Queensland Water Quality Guidelines 2009, Department of Environment and Heritage Protection, 2009.

Wind farm see schedule 24 of the Planning Regulation 2017.

Note: Wind farm:

- 1. means the use of premises for generating electricity by wind force, other than electricity that is to be used mainly on the premises for a domestic or rural use; and
- 2. includes the use of premises for any of the following, if the use relates or is ancillary to the use stated in paragraph 1:
  - a. a wind turbine, wind monitoring tower or anemometer;
  - b. a building or structure including for example, temporary worker's accommodation and site offices;
  - c. a storage area or maintenance facility including for example, lay down areas;
  - d. infrastructure or works, including, for example, site access, foundations, electrical works substations or landscaping.

Development involving **wind turbines** that is not a material change of use for a **wind farm** may otherwise be assessable development under a planning instrument.

Wind monitoring tower means a mast that incorporates wind speed and direction measuring and recording equipment.

Wind turbine see schedule 24 of the Planning Regulation 2017.

Note: Wind turbine means a machine or generator that uses wind force to generate electricity, and includes the blades of the machine or generator.

### 23.6 Abbreviations

CASA - Civil Aviation Safety Authority

dB(A) – decibels measured on the 'A' frequency weighting network

**Free-field** – a region in space where sound may propagate free from any form of obstruction, usually greater than 5 metres from any significant vertical reflecting surface

L<sub>Aeq</sub> – the equivalent continuous (time-averaged) A-weighted sound level

 $L_{A90}$  – the A-weighted noise level equalled or exceeded for 90 percent of the measurement period. This is commonly referred to as the background noise level

**LED** – Light Emitting Diode

# State code 24: Urban design outcomes for significant projects

## 24.1 Purpose statement

The purpose of the code is to ensure that significant projects result in high quality urban design outcomes for a locality or region; creating a physical environment that increases liveability, creates a sense of place, supports positive health and wellbeing, and improves social and economic interactions.

Note: Please refer to the Urban design outcomes for significant projects state code planning guideline, Department of Infrastructure, Local Government and Planning, 2017.

## 24.2 Urban design principles

#### 24.2.1 Context

Urban design is both a process and an outcome of creating places in which people live, engage with each other and the physical environment around them. Built form and its relationship with public, open and active spaces plays a key role in facilitating liveable communities that support Queensland's social and economic prosperity.

High-quality urban design and effective place making is an essential element of improving community health and well-being, facilitating social cohesion, and creating resilient, sustainable and affordable communities. This is particularly important for significant projects within a metropolitan context.

Well-designed communities create places and spaces that are vibrant, prosperous, diverse, inclusive, sustainable, accessible, connected, healthy and safe. These features increase liveability, create a sense of place, support positive health and wellbeing, and improve social and economic interactions.

Well implemented urban design outcomes also enhance the quality of life for residents and visitors, resulting in attractive places to live, work and play.

## 24.2.2 Principles

Significant projects have a critical role to play in contributing to the well-being and liveability of the communities through high quality urban design. Accordingly, significant projects should incorporate the following principles that underpin best practice urban design:

#### Development should:

- 1. be responsive to local climatic conditions and patterns
- 2. be inspired by local places and incorporate locally significant character and cultures
- 3. consider, incorporate and enhance the natural landscape
- 4. work with and respond to natural systems and processes (i.e. hydrology and ecology)
- 5. create functional, well defined, legible and connected streets and spaces
- 6. deliver diverse and well integrated development density and land use mix, sympathetic to local settings and values
- 7. consider and embed opportunities for adaptation and change
- 8. be innovative, creative and forward-thinking.

## 24.3 Achieving the principles

In addressing the eight urban design principles, applicants should prepare a statement including a description of the overarching project vision and summary of how the urban design principles are reflected in the project.

The statement should demonstrate that a robust urban design process has informed the proposal and that high-quality outcomes will be achieved. Should any of the urban design principles not be reflected in the project, the statement should include appropriate justification for this omission.

The statement will be assessed by the Office of the Queensland Government Architect and by SARA, providing a basis for design advice to the assessment manager.

# **Appendix 1: Development requiring SARA assessment**

Table 1: Assessment manager role

Matters of state	Development	Relevant	Assessment	Relevant state codes
interest	type	provisions of	paths	
		the Regulation*	available	
Aquaculture	Material change of use	Schedule 10 part 6, div 1, sub 2, table 1	Standard	State code 17: Aquaculture
Environmentally relevant activities	Material change of use	Schedule 10, part 5, div 3, table 1	Standard	State code 22: Environmentally relevant activities
Declared fish habitat areas	Operational work	Schedule 10, part 6, div 2, sub 2, table 1	Standard	State code 12: Development in a declared fish habitat area
Marine plants	Operational work	Schedule 10, part 6, div 3, sub 2, table 1	Standard	State code 11: Removal, destruction or damage or marine plants
Waterway barrier works	Operational work	Schedule 10, part 6, div 4, sub 2, table 1	Standard	State code 18: Constructing or raising waterway barrier works in fish habitats
Native vegetation clearing	Operational work	Schedule 10, part 3, div 3, table 1	Standard	State code 16: Native vegetation clearing
Queensland heritage	Various aspects of development	Schedule 10, part 8, div 2, sub 2, table 1 Schedule 10, part 8, div 2, sub 2, table 2	Standard	State code 14: Queensland heritage
Tidal works or development in a coastal management district	Operational work	Schedule 10, part 17, div 2, table 1	Standard	State code 8: Coastal development and tidal works
Taking or interfering with water	Operational work	Schedule 10, part 19, div 1, sub 2, table 1	Standard	State code 10: Taking or interfering with water
Removing quarry material	Various aspects of development	Schedule 10, part 19, div 2, sub 2, table 1	Standard	State code 15: Removal of quarry material from a watercourse or lake
Wetland protection area	Operational work	Schedule 10, part 20, div 3, table 1	Standard	State code 9: Great Barrier Reef wetland protection areas
Referable dams	Operational work	Schedule 10, part 19, div 3, sub 2, table 1	Standard	State code 20: Referable dams
Hazardous chemical facilities	Material change of use	Schedule 10, part 7, div 2, table 1	Standard	State code 21: Hazardous chemical facilities

Matters of state interest	Development type	provisions of	Assessment paths available	Relevant state codes
Wind farms	Material change of use	Schedule 10, part 21, div 2, table 1	Standard	State code 23: Wind farm development

Table 2: Referral agency role

Matters of state	Development	Relevant	Assessment	Relevant state codes
interest	type	provisions of	paths	
		the Regulation	available	
Aquaculture	Material change of use	Schedule 10, part 6, div 1, sub 3, table 1	Standard	State code 17: Aquaculture
Environmentally relevant activities	Material change of use	Schedule 10, part 5, div 4, table 2	Standard	State code 22: Environmentally relevant activities
Declared fish habitat area	Building work	Schedule 9, part 3, div 1, table 2	Standard	State code 12: Development in a declared fish habitat area
	Operational work	Schedule 10, part 6, div 2, sub 3, table 1	Standard	
Marine plants	Operational work	Schedule 10, part 6, div 3, sub 3, table 1	Standard	State code 11: Removal, destruction or damage of marine plants
	Reconfiguring a lot where involving operational work for the removal, destruction or damage to marine plants	Schedule 10, part 6, div 3, sub 3, table 2	Standard	
	Material change of use where involving operational work for the removal, destruction or damage to marine plants	Schedule 10, part 6, div 3, sub 3, table 2	Standard	
Native vegetation clearing	Reconfiguring a lot	Schedule 10, part 3, div 4, table 2	Standard	State code 16: Native vegetation clearing
	Operational work	Schedule 10, part 3, div 4, table 1	Standard	
	Material change of use	Schedule 10, part 3, div 4, table 3	Standard	

Matters of state	Development	Relevant	Assessment	Relevant state codes
interest	type	provisions of	paths	
		the Regulation	available	
Queensland heritage	Various	Schedule 10,	Standard	State code 14: Queensland
	aspects of	part 8, div 2, sub		heritage
	development	3, table 1		
		Schedule 10,		
		part 8, div 2, sub		
		3, table 2		
Tidal works or work	Material	Schedule 10,	Standard	State code 8: Coastal
in a coastal	change of use	part 17, div 3,		development and tidal works
management district		table 6		
	Reconfiguring	Schedule 10,	Standard	State code 8: Coastal
	a lot	part 17, div 3, table 5		development and tidal works
	Operational	Schedule 10,	FastTrack5	Refer to Appendix 2:
	work	part 17, div 3,	Tastriasko	FastTrack5 qualifying criteria for
		table 1		this trigger
			Standard	State code 8: Coastal
				development and tidal works
	Building work	Schedule 9,	Standard	State code 8: Coastal
		part 3, div 1, table 1		development and tidal works
Taking or interfering	Operational	Schedule 10,	Standard	State code 10: Taking or
with water	work	part 19, div 1,	Staridard	interfering with water
		sub 3, table 1		intervening that trace
Removing quarry	All aspects of	Schedule 10,	Standard	State code 15: Removal of
material	development	part 19, div 2,		quarry material from a
0-1	0	sub 3, table 1	Ota - I I	watercourse or lake
Category 3 levees	Operational work	Schedule 10, part 19, div 4,	Standard	State code 19: Category 3 levees
	WOIK	sub 3, table 1		levees
Waterway barrier	Operational	Schedule 10,	Standard	State code 18: Construction or
works	work	part 6, div 4,		raising waterway barrier works
		sub 3, table 1		in fish habitats
Wetland protection	Reconfiguring	Schedule 10,	Standard	State code 9: Great Barrier
area	a lot	part 20, div 4, table 2		Reef wetland protection areas
	Material	Schedule 10,	Standard	
	change of use	part 20, div 4,	Ctaridara	
		table 3		
	Operational	Schedule 10,	Standard	
	work	part 20, div 4,		
Contaminated land	Reconfiguring	table 1 Schedule 10,	Standard	State code 13: Unevaleded
	a lot	part 4, div 3,	Statiuatu	State code 13: Unexploded ordnance
		table 1		3.3
	Material	Schedule 10,	Standard	State code 13: Unexploded
	change of use	part 4, div 3,		ordnance
5		table 1		
Referable dams	Operational	Schedule 10,	Standard	State code 20: Referable dams
	work	part 19, div 3, sub 3, table 1		
Maritime safety	Operational	Schedule 10,	FastTrack5	Refer to Appendix 2:
	work	part 17, div 3,		FastTrack5 qualifying criteria for
		table 2		this trigger

Matters of state	Development	Relevant	Assessment	Relevant state codes
interest	type	provisions of	paths	
		the Regulation	available	
0	5		Standard	State code 7: Maritime safety
State transport corridors	Building work	Schedule 9, part 3, div 1, table 3	FastTrack5	Refer to Appendix 2: FastTrack5 qualifying criteria for this trigger
		Schedule 9, part 3, div 1, table 4	Standard	If near a state controlled road or future state controlled road: State code 1: Development in a state-controlled road environment
				If near a railway corridor or future railway corridor: State code 2: Development in a railway environment
				If near a busway corridor or future busway corridor: State code 3: Development in a busway environment
				If near a light rail corridor or future light rail corridor: State code 4: Development in a light rail environment
	Reconfiguring a lot	Schedule 10, part 9, div 4, sub 2, table 1	FastTrack5	Refer to Appendix 2: FastTrack5 qualifying criteria for this trigger
		Schedule 10, part 9, div 4, sub 2, table 2 Schedule 10,	Standard	If near a state controlled road or future state controlled road: State code 1: Development in a state-controlled road environment
		part 9, div 4, sub 2, table 3		If near a railway corridor or future railway corridor: State code 2: Development in a railway environment
				If near a busway corridor or future busway corridor: State code 3: Development in a busway environment
				If near a light rail corridor or future light rail corridor: State code 4: Development in a light rail environment
	Material change of use	Schedule 10, part 9, div 4, sub 2, table 4	FastTrack5	Refer to Appendix 2: FastTrack5 qualifying criteria for this trigger
			Standard	If near a state controlled road or future state controlled road: State code 1: Development in a state-controlled road environment

Matters of state	Development	Relevant	Assessment	Relevant state codes
interest	type	provisions of	paths	
		the Regulation	available	
				If near a railway corridor or future railway corridor: State code 2: Development in a railway environment
				If near a busway corridor or future busway corridor: State code 3: Development in a busway environment
				If near a light rail corridor or future light rail corridor: State code 4: Development in a light rail environment
	Operational work	Schedule 10, part 9, div 4, sub 2, table 5	FastTrack5	Refer to Appendix 2: FastTrack5 qualifying criteria for this trigger
		Schedule 10, part 9, div 4, sub 2, table 6	Standard	If near a state controlled road or future state controlled road: State code 1: Development in a state-controlled road environment
				If near a railway corridor or future railway corridor: State code 2: Development in a railway environment
				If near a busway corridor or future busway corridor: State code 3: Development in a busway environment If near a light rail corridor or future light rail corridor: State code 4: Development in a light rail environment
State transport infrastructure (thresholds)	Various aspects of development	Schedule 10, part 9, div 4, sub 1, table 1	Standard	State code 6: Protection of state transport networks
State-controlled transport tunnels	Reconfiguring a lot	Schedule 10, part 9, div 4, sub 3, table 1	FastTrack5	Refer to Appendix 2: FastTrack5 qualifying criteria for this trigger
			Standard	State code 5: Development in a state-controlled transport tunnel environment
	Material change of use	Schedule 10, part 9, div 4, sub 3, table 2	FastTrack5	Refer to Appendix 2: FastTrack5 qualifying criteria for this trigger
			Standard	State code 5: Development in a state-controlled transport tunnel environment
	Operational work	Schedule 10, part 9, div 4, sub 3, table 3	FastTrack5	Refer to Appendix 2: FastTrack5 qualifying criteria for this trigger

Matters of state	Development	Relevant	Assessment	Relevant state codes
interest	type	provisions of	paths	
		the Regulation	available Standard	State code 5: Development in a
			Staridard	state-controlled transport tunnel environment
Brisbane core port land	Operational work – near a state transport corridor	Schedule 10, part 13, div 1, sub 2, table 2	FastTrack5	Refer to Appendix 2: FastTrack5 qualifying criteria for this trigger  If near a state controlled road or future state controlled road: State code 1: Development in a
				state-controlled road environment
				If near a railway corridor or future railway corridor: State code 2: Development in a railway environment
				If near a busway corridor or future busway corridor: State code 3: Development in a busway environment
				If near a light rail corridor or future light rail corridor: State code 4: Development in a light rail environment
	Operational work – near a future state transport corridor	Schedule 10, part 13, div 1, sub 2, table 3	Standard	If near a state controlled road or future state controlled road: State code 1: Development in a state-controlled road environment
				If near a railway corridor or future railway corridor: State code 2: Development in a railway environment
				If near a busway corridor or future busway corridor: State code 3: Development in a busway environment
				If near a light rail corridor or future light rail corridor: State code 4: Development in a light rail environment
	Material change of use – near a state	-	FastTrack5	Refer to Appendix 2: FastTrack5 qualifying criteria for this trigger
	transport corridor or that is a future state transport corridor		Standard	If near a state controlled road or future state controlled road: State code 1: Development in a state-controlled road environment

Matters of state	Development	Relevant	Assessment	Relevant state codes
interest	type	provisions of the Regulation	paths available	
		the Regulation	avallable	If near a railway corridor or future railway corridor: State code 2: Development in a railway environment If near a busway corridor or future busway corridor: State code 3: Development in a busway environment  If near a light rail corridor or future light rail corridor: State
				code 4: Development in a light rail environment
	Material change of use of premises for an environmental ly relevant activity	Schedule 10, part 13, div 1, sub 2, table 6	Standard	State code 22: Environmentally relevant activities
	Material change of use or operational work – tidal works or works in a coastal management district	Schedule 10, part 13, div 1, sub 2, table 7	Standard	State code 8: Coastal development and tidal works
	Material change of use – hazardous chemical facility	Schedule 10, part 13, div 1, sub 2, table 8	Standard	State code 21: Hazardous chemical facilities
	Operational work – taking or interfering with water	Schedule 10, part 13, div 1, sub 2, table 9	Standard	State code 10: Taking or interfering with water
	Operational work – referable dams	Schedule 10, part 13, div 1, sub 2, table 10	Standard	State code 20: Referable dams
	Material change of use or operational work – relating to fisheries	Schedule 10, part 13, div 1, sub 2, table 11	Standard	State code 12: Development in a declared fish habitat area OR State code 11: Removal, destruction or damage of marine plants OR State code 17: Aquaculture OR State code 18: Constructing or raising waterway barrier works in fish habitats

Matters of state interest	Development type	Relevant provisions of the Regulation	Assessment paths available	Relevant state codes
	Various development below the high-water mark and within Port of Brisbane's port limits under the Transport Infrastructure Act 1994	Schedule 10, part 13, div 2, table 1	Standard	State code 7: Maritime safety
Urban design	Material change of use	Schedule 10, part 18, table 1	Standard (advice only)	State code 24: Urban design

## Appendix 2: FastTrack5 qualifying criteria

### Introduction

The FastTrack5 framework is a streamlined SARA referral and assessment process that allows aspects of development subject to selected triggers to be assessed and decided quickly by SARA, and to be subject to a reduced fee. Appendix 2 includes the qualifying criteria for each of those triggers eligible for assessment under the SARA FastTrack5 framework (summarised below).

For each eligible trigger, the qualifying criteria checklists are provided to enable applicants to self-determine whether or not a triggered aspect of development qualifies for FastTrack5 assessment. Having confirmed that the relevant aspect of the development meets the SARA FastTrack5 qualifying criteria, SARA can quickly assess and provide a referral response or decisions for a FastTrack5 eligible aspect of the development within five days of acceptance that the aspect of development meets the qualifying criteria. Applications that qualify for SARA FastTrack5 assessment will not be subject to an information request and standard conditions will generally be applied.

## SARA FastTrack5 triggers and qualifying criteria

Trigger	Checklist name
Schedule 9, part 3, division 1, table 3 (building work under the	FastTrack5 qualifying criteria checklist
Building Act that is near a state transport corridor)	1: State transport corridors (material
Schedule 10, part 9, division 4, subdivision 2, table 4 (material	change of use, operational works,
change of use of premises near a state transport corridor or that is	building work)
a future state transport corridor)	
Schedule 10, part 9, division 4, subdivision 2, table 5 (operational	
work on premises near a state transport corridor)	
Schedule 10, part 13, division 1, subdivision 2, table 2 (operational	
work on premises near a state transport corridor that is on Brisbane	
core port land)	
Schedule 10, part 13, division 1, subdivision 2, table 4 (material	
change of use on premises near a state transport corridor that is on	
Brisbane core port land)	
Schedule 10, part 9, division 4, subdivision 2, table 1 (reconfiguring	FastTrack5 qualifying criteria checklist
a lot near a state transport corridor)	2: State transport corridors
Schedule 10, part 9, division 4, subdivision2, table 3 (reconfiguring	(reconfiguring a lot)
a lot that is near a state-controlled road intersection)	
Schedule 10, part 9, division 4, subdivision 3, table 1 (reconfiguring	FastTrack5 qualifying criteria checklist
a lot near a state-controlled transport tunnel)	3: State-controlled transport tunnels
Schedule 10, part 9, division 4, subdivision 3, table 2 (material	(reconfiguring a lot, material change of
change of use near a state-controlled transport tunnel or in a future	use, operational works)
state-controlled transport tunnel)	
Schedule 10, part 9, division 4, subdivision 3, table 3 (operational	
work near a state-controlled transport tunnel or in a future state-	
controlled transport tunnel).	
Schedule 10, part 17, division 3, table 2 (tidal works)	FastTrack5 qualifying criteria checklist
	4: Tidal works – impacts on maritime
	safety (operational work)

Trigger	Checklist name
Schedule 10, part 17, division 3, table 1 (tidal works)	FastTrack5 qualifying criteria checklist
	5: Tidal works – coastal protection
	(operational work)

## FastTrack5 qualifying criteria checklist 1

State transport corridor (material change of use, operational works, building works) (SDAP version 2.2 dated 9 March 2018)

This form must be used when seeking a FastTrack5 assessment pathway for the following triggers:

- 1. schedule 10, part 9, division 4, subdivision 2, table 4 (material change of use of premises near a state transport corridor or that is a future state transport corridor)
- 2. schedule 10, part 9, division 4, subdivision 2, table 5 (operational work on premises near a state transport corridor)
- 3. schedule 9, part 3, division 1, table 3 (building work under the Building Act that is near a state transport corridor)
- 4. schedule 10, part 13, division 1, subdivision 2, table 2 (operational work on premises near a state transport corridor that is on Brisbane core port land)
- 5. schedule 10, part 13, division 1, subdivision 2, table 4 (material change of use on premises near a state transport corridor that is on Brisbane core port land)

When submitting an application containing a FastTrack5 trigger to SARA using MyDAS2, applicants must upload a completed qualifying criteria checklist for each eligible trigger. The responses on the form must demonstrate that the triggered aspect of development meets all qualifying criteria applicable to the relevant eligible trigger.

Applicants should also provide or make reference to any supporting information or material that supports their claim for a FastTrack5 assessment.

When seeking FastTrack5 assessment for eligible triggers, you must:

- 1. have completed any other forms relevant to your application
- 2. upload a completed copy of this form when referring your application using MyDAS2
- 3. provide all supporting information required on the form at the time of lodgement this information will assist SARA in undertaking its FastTrack5 assessment.

All terms used in this form have the meaning given in the Act or the regulation.

Qı	ualifying criteria	Response	Supporting information provided
Sta	ate transport planning		
1	Is the proposed development located on land identified as:  a. required for the planned upgrade of a state transport corridor; or  b. a future state transport corridor.	No: Proceed to question 2.  An excerpt from the DA mapping system must be provided demonstrating that the subject site is not located:  a. on land required for the planned upgrade of a state transport corridor; or  b. in a future state transport corridor.  Note: The DA mapping system is available on the department's website.	
		<b>Yes:</b> Application cannot qualify for the FastTracks and must follow the standard SARA assessment. relevant SDAP state codes.	
En	vironmental emissions		
2		No: Proceed to question 3.	

Qu	alifying criteria	Response	Supporting
			information provided
	Does the proposed development include one or more of the following uses:  a. child care centre b. educational establishment c. hospital d. multiple dwelling e. relocatable home park f. residential care facility g. resort complex h. retirement facility i. rooming accommodation j. short term accommodation k. tourist park.	Yes: Application cannot qualify for the FastTrack5 asset and must follow the standard SARA assessment. Please relevant SDAP state codes.	ssment pathway
Sta	te transport protection		
3	Does the proposed development include works within 25 metres of a state transport corridor or in a future state transport corridor?  Statutory note: Works includes building work and operational work as defined under the Act.	No: Proceed to question 4.  A site/layout plan must be provided and demonstrate that works are not proposed within 25 metres of a state transport corridor or in a future state transport corridor.  Yes: Application cannot qualify for the FastTrack5 asserand must follow the standard SARA assessment. Please relevant SDAP state codes.	
4	Does the subject site include an overland flow path?	No: Proceed to question 4b. A site/layout plan must be provided and demonstrate the subject site does not include	
	Note: An overland flow path is open space floodway channels, road reserves, pavement expanses and other flow paths that convey flows typically in excess of the capacity of the minor drainage system (Road Drainage Manual July 2015).  AND	an overland flow path.  Yes: Application cannot qualify for the FastTrack5 asse and must follow the standard SARA assessment. Please relevant SDAP state codes.	
	b. Is the stormwater point of discharge: i. within 50 metres of a flood hazard area; and ii. the flood hazard area adjoins a state transport corridor or future state transport corridor.  Note: Land identified as a 'flood hazard area' is identified in the SPP interactive mapping system or the relevant planning scheme.	No: Proceed to question 4c.  An excerpt from the SPP interactive mapping system or the relevant planning scheme must be provided and demonstrate:  a. the stormwater point of discharge is located 50 metres or more from the flood hazard area; or  b. that a flood hazard area does not adjoin a state transport corridor or future state transport corridor.  Note: The SPP interactive mapping system is available on the department's website.	
	The stormwater point of discharge is the location at which stormwater leaves the subject site.  AND	<b>Yes:</b> Application cannot qualify for the FastTrack5 assess and must follow the standard SARA assessment. Please relevant SDAP state codes.	
	c. Will the proposed development alter the existing topography (lay of the land) of the subject site resulting in stormwater flowing towards any state transport corridor or future state transport corridor?	No: Proceed to question 5. A site/layout plan must be provided and include contour lines demonstrating the subject site, pre and post development, slopes away from any state transport corridor or future state transport corridor.	
		<b>Yes:</b> Application cannot qualify for the FastTrack5 assert and must follow the standard SARA assessment. Please relevant SDAP state codes.	
	hicular access	No. Present to guartier C	
5	Does the proposed development:	No: Proceed to question 6. A site/layout plan must be provided and demonstrate the subject site does not have an	

Qualifying criteria		Response		Supporting information
	<ul> <li>i. propose a 'new or changed access' between the subject site and a state transport corridor; or</li> <li>ii. have an existing access between the subject site and a state transport corridor.</li> </ul>	existing, new or changed access to a state-controlled road.  Yes: Proceed to question 5b.		provided
	Note: A 'new or changed access' is defined in schedule 24 of the Planning Regulation.  AND			
	b. Does the proposed development include an existing access or propose a 'new or changed access' to a:  i. busway corridor  ii. light rail corridor  iii. railway corridor.  Note: A 'new or changed access' is	No: Proceed to question 5c.  A site/layout plan must be provided and demonstrate that the subject site does not include an existing access or a proposed 'new or changed access' to a:  i. busway corridor ii. light rail corridor iii. railway corridor.		
	defined in schedule 26 of the Planning Regulation.  AND	<b>Yes:</b> Application cannot qualify for the FastTrack5 and must follow the standard SARA assessment. Frelevant SDAP state codes.		
	c. Has a permitted road access location approval, under section 62 of the <i>Transport Infrastructure Act 1994</i> , been granted by the Department of Transport and Main Roads (DTMR) for the proposed or existing access to the statecontrolled road in relation to the proposed development?	Yes: Proceed to question 6.  A copy of the section 62 approval granted by DTMR must be provided. The development which is the subject of the application must be of an equivalent use and intensity for which the section 62 approval was issued, and the section 62 approval must have been granted no more than 5 years prior to the lodgement of the application.		emont nathway and
		<b>No:</b> Application cannot qualify for the FastTrack5 assessment pathway and must follow the standard SARA assessment. Please refer to the relevant SDAP state codes.		
6	Does the proposed development include an access onto a local government road within 100 metres of an intersection with a state-controlled road?	No: Proceed to question 7.  An excerpt from the DA mapping system must be provided demonstrating that any access onto a local government road is not located within 100 metres of an intersection with a state-controlled road.  Note: The DA mapping system is available on the department's website.		
		Yes: Application cannot qualify for the FastTrack5 assessment pathway and must follow the standard SARA assessment. Please refer to the relevant SDAP state codes.		
7	Does the proposed development include an access onto a local government road within 100 metres of a railway crossing?	No: Application is eligible for FastTrack5 assessment.  A site/layout plan must be provided and demonstrate that any access onto a local government road is not located within 100 metres of an intersection with a railway crossing.  Yes: Application cannot qualify for the FastTrack5 and must follow the standard SARA assessment. Frelevant SDAP state codes.		

## **Glossary of terms**

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA** mapping system is available on the department's website.

**Planned upgrade** means an extension, upgrade, or duplication of state transport infrastructure or transport networks for which affected land has been identified:

- 1. in a publicly available government document; or
- in written advice to affected land owners.

Note: Government documents are Commonwealth, state or local government documents that include a statement of intent for, or a commitment to, a planning outcome or infrastructure provision. See the **DA mapping system**.

OFFICE USE ONLY									
Date received:		Reference numbers:							

## FastTrack5 qualifying criteria checklist 2

#### State transport corridor (reconfiguring a lot)

(SDAP version 2.2 dated 9 March 2018)

This form must be used when seeking a FastTrack5 assessment pathway for the following triggers:

- 1. schedule 10, part 9, division 4, subdivision 2, table 1 (reconfiguring a lot near a state transport corridor)
- 2. schedule 10, part 9, division 4, subdivision2, table 3 (reconfiguring a lot that is near a state-controlled road intersection)

When submitting an application containing a FastTrack5 trigger to SARA using MyDAS2, applicants must upload a completed qualifying criteria checklist for each eligible trigger. The responses on the form must demonstrate that the triggered aspect of development meets all qualifying criteria applicable to the relevant eligible trigger.

Applicants should also provide or make reference to any supporting information or material that supports their claim for a FastTrack5 assessment.

When seeking FastTrack5 assessment for eligible triggers, you must:

- 1. have completed any other forms relevant to your application
- 2. upload a completed copy of this form when referring your application using MyDAS2
- provide all supporting information required on the form at the time of lodgement this information will assist SARA in undertaking its FastTrack5 assessment.

All terms used in this form have the meaning given in the Act or the regulation.

Volumetric subdivision only:

	ualifying criteria	Response	Supporting information provided
1	Is the proposed development solely for the purpose of a volumetric subdivision?	Yes: Application is eligible for FastTrack5 assessment. The application is eligible for FastTrack5 assessment. No furthe assessment against the remaining criteria is required.  No: Application cannot qualify for the FastTrack5 assessment pamust follow the standard SARA assessment. Please refer to the SDAP state codes.	

All other development: **Qualifying criteria** Response Supporting provided State transport planning Is the proposed development located No: Proceed to question 2. on land identified as: An excerpt from the DA mapping system must be provided and demonstrate the subject a. required for the planned upgrade of a state transport site is not located: corridor; or a. on land required for the planned upgrade b. a future state transport corridor. of a state transport corridor; or on a future state transport corridor. Note: The DA mapping system is available on the department's website. Yes: Application cannot qualify for the FastTrack5 assessment pathway and must follow the standard SARA assessment. Please refer to the relevant SDAP state codes. **Environmental emissions** Does the proposed development No: Proceed to question 3. include one or more of the following

uses:

Qualifying criteria		Response	Supporting
			information
	a. child care centre     b. educational establishment	Yes: Application cannot qualify for the FastTrack5 asset and must follow the standard SARA assessment. Please	
	c. hospital	relevant SDAP state codes.	e reier to the
	d. multiple dwelling		
	e. relocatable home park		
	f. residential care facility		
	<ul><li>g. resort complex</li><li>h. retirement facility</li></ul>		
	i. rooming accommodation		
	j. short-term accommodation		
	k. tourist park.		
	e transport protection		
3	Does the proposed development	No: Proceed to question 4.	
	include works within 25 metres of a state transport corridor or in a future	A site/layout plan must be provided and demonstrate that works are not proposed	
	state transport corridor?	within 25 metres of a state transport corridor or	
		in a future state transport corridor.	
	Statutory note: Works includes building	Yes: Application cannot qualify for the FastTrack5 asset	
	work and operational work as defined under the Act.	and must follow the standard SARA assessment. Please	e refer to the
4		relevant SDAP state codes.  No: Proceed to question 4b.	
4	a. Does the subject site include an overland flow path?	A site/layout plan must be provided and	
	cronana non pann	demonstrate the subject site does not include	
	Note: An overland flow path is open	an overland flow path.	
	space floodway channels, road reserves, pavement expanses and other flow paths	Yes: Application cannot qualify for the FastTrack5 asset	
	that convey flows typically in excess of	and must follow the standard SARA assessment. Please relevant SDAP state codes.	e refer to the
	the capacity of the minor drainage system	relevant SDAP state codes.	
	(Road Drainage Manual July 2015).  AND		
	b. Is the stormwater point of	No: Proceed to question 4c.	
	discharge:	An excerpt from the SPP interactive mapping	
	i. within 50 metres of a flood	system or the relevant planning scheme must	
	hazard area	be provided and demonstrate that:	
	ii. the flood hazard area adjoins a state transport	a. the stormwater point of discharge is	
	corridor or future state	a. the stormwater point of discharge is located 50 metres or more from the flood	
	transport corridor.	hazard area; or	
	·	b. that a flood hazard area does not adjoin a	
	Note: Land identified as a 'flood hazard area' is identified in the SPP interactive	state transport corridor or future state	
	mapping system or the relevant planning	transport corridor.	
	scheme.	Note: The SPP interactive mapping system is	
	The stormwater point of discharge is the	available on the department's website.	
	location at which stormwater leaves the	Yes: Application cannot qualify for the FastTrack5 asset and must follow the standard SARA assessment. Please	
	subject site.	relevant SDAP state codes.	TOIGH TO THE
	AND		
	<ul> <li>Will the proposed development alter the existing topography (lay</li> </ul>	No: Proceed to question 5. A site/layout plan must be provided and include	
	of the land) of the subject site	contour lines demonstrating the subject site,	
	resulting in stormwater flowing	pre and post development, slopes away from	
	towards a state transport	any state transport corridor or future state	
	corridor or future state transport corridor?	transport corridor.	sement nathway
	comaci:	Yes: Application cannot qualify for the FastTrack5 asset and must follow the standard SARA assessment. Please	
		relevant SDAP state codes.	
Veh	icular access		
5	a. Does the proposed	No: Proceed to question 6.	
	development: i. propose a 'new or changed	A site/layout plan must be provided and	
	access' between the subject	demonstrate the subject site does not have an existing, new or changed access to a state-	
	access someon the day, out	controlled road.	

Qua	alifying criteria	Response	Supporting
			information
	site and a state transport corridor; or ii. have an existing access between the subject site and a state transport corridor.  Note: A 'new or changed access' is	Yes: Proceed to question 5b.	provided
	defined in schedule 26 of the Planning Regulation.  AND		
	b. Does the proposed development include an existing access or propose a 'new or changed access' to a:  i. busway corridor  ii. light rail corridor  iii. railway corridor.  Note: A 'new or changed access' is	No: Proceed to question 5c.  A site/layout plan must be provided and demonstrate the subject site does not include an existing access or a proposed 'new or changed access' to a:  i. busway corridor  ii. light rail corridor  iii. railway corridor.  Yes: Application cannot qualify for the FastTrack5 asses	ssment pathway
	defined in schedule 26 of the Planning Regulation.  AND	and must follow the standard SARA assessment. Please relevant SDAP state codes.	
	c. Has a permitted road access location approval, under section 62 of the <i>Transport Infrastructure Act 1994</i> , been granted by the Department of Transport and Main Roads (DTMR) for the proposed or existing access to the state-controlled road in relation to the	Yes: Proceed to question 6. A copy of the section 62 approval granted by DTMR must be provided. The development which is the subject of the application must be of an equivalent use and intensity for which the section 62 approval was issued, and the section 62 approval must have been granted no more than five years prior to the lodgement of the application.	
	proposed development?	<b>No:</b> Application cannot qualify for the FastTrack5 assess and must follow the standard SARA assessment. Please relevant SDAP state codes.	
6	Does the proposed development include an access onto a local government road within 100 metres of an intersection with a state-controlled road?	No: Proceed to question 7.  An excerpt from the DA mapping system must be provided demonstrating that any access onto a local government road is not located within 100 metres of an intersection with a state-controlled road.  Note: The DA mapping system is available on the	
		department's website.  Yes: Application cannot qualify for the FastTrack5 assess and must follow the standard SARA assessment. Please relevant SDAP state codes.	
7	Does the proposed development include an access onto a local government road within 100 metres of a railway crossing?	No: Application is eligible for FastTrack5 assessment.  A site/layout plan must be provided and demonstrate that any access onto a local government road is not located within 100 metres of an intersection with a railway crossing.  Yes: Application cannot qualify for the FastTrack5 assessment must follow the standard SARA assessment. Please relevant SDAP state codes.	

# **Glossary of terms**

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA mapping system** is available on the department's website.

**Planned upgrade** means an extension, upgrade, or duplication of state transport infrastructure or transport networks for which affected land has been identified:

- 1. in a publicly available government document; or
- 2. in written advice to affected land owners.

Note: Government documents are Commonwealth, state or local government documents that include a statement of intent for, or a commitment to, a planning outcome or infrastructure provision. See the **DA mapping system**.

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## FastTrack5 qualifying criteria checklist 3

State-controlled transport tunnel (reconfiguring a lot, material change of use, operational works) (SDAP version 2.2 dated 9 March 2018)

This form must be used when seeking a FastTrack5 assessment pathway for the following triggers:

- 1. schedule 10, part 9, division 4, subdivision 3, table 1 (reconfiguring a lot near a state-controlled transport tunnel)
- 2. schedule 10, part 9, division 4, subdivision 3, table 2 (material change of use near a state-controlled transport tunnel or in a future state-controlled transport tunnel)
- 3. schedule 10, part 9, division 4, subdivision 3, table 3 (operational work near a state-controlled transport tunnel or in a future state-controlled transport tunnel).

When submitting an application containing a FastTrack5 trigger to SARA using MyDAS2, applicants must upload a completed qualifying criteria checklist for each eligible trigger. The responses on the form must demonstrate that the triggered aspect of development meets all qualifying criteria applicable to the relevant eligible trigger.

Applicants should also provide or make reference to any supporting information or material that supports their claim for a FastTrack5 assessment.

When seeking FastTrack5 assessment for eligible triggers, you must:

- 1. have completed any other forms relevant to your application
- 2. upload a completed copy of this form when referring your application using MyDAS2
- 3. provide all supporting information required on the form at the time of lodgement this information will assist SARA in undertaking its FastTrack5 assessment.

All terms used in this form have the meaning given in the Act or the regulation.

Qualifying criteria		Response	Supporting information		
			provided		
Sta	ate transport planning				
1	Is the proposed development located on land identified as a: a. state-controlled transport tunnel; or b. future state-controlled transport tunnel.	No: Proceed to question 2.  An excerpt from the DA mapping system must be provided and demonstrate the subject site is not located on land identified as a:  a. state-controlled transport tunnel; or b. future state-controlled transport tunnel.  Note: The DA mapping system is available on the department's website.			
		<b>Yes:</b> Application cannot qualify for the FastTrack5 ass and must follow the standard SARA assessment. Plea relevant SDAP state codes.			
	vironmental emissions				
2	Does the proposed development	No: Proceed to question 3.			
	include one or more of the following uses:  a. accommodation activity b. child care centre c. educational establishment d. hospital.	<b>Yes:</b> Application cannot qualify for the FastTrack5 ass and must follow the standard SARA assessment. Plea relevant SDAP state codes.	essment pathway se refer to the		
	State transport protection				
3	Does the proposed development include works on or within 50 metres of a state-controlled transport tunnel	No: Proceed to question 4.  A site/layout plan must be provided and demonstrate that works are not proposed within 50 metres of a state-controlled transport			

Qı	ualifying criteria	Response	Supporting information provided	
	or future state-controlled transport tunnel?  Note: Works includes building work and operational work as defined under the Act.	tunnel or a future state-controlled transport tunnel.  Yes: Application cannot qualify for the FastTrack5 asses and must follow the standard SARA assessment. Please relevant SDAP state codes.		
4	Does the subject site include an overland flow path?  Note: An overland flow path is open space floodway channels, road reserves, pavement expanses and other flow paths that convey flows typically in excess of the capacity of the minor drainage system (Road Drainage Manual July 2015).  AND	No: Proceed to question 4b. A site/layout plan must be provided and demonstrate the subject site does not include an overland flow path.  Yes: Application cannot qualify for the FastTrack5asses and must follow the standard SARA assessment. Please relevant SDAP state codes.	sment pathway e refer to the	
	b. Is the stormwater point of discharge: i. within 50 metres of a flood hazard area ii. the flood hazard area adjoins a state-controlled transport tunnel or future state-controlled transport tunnel.  Note: Land identified as a 'flood hazard area' is identified in the SPP interactive mapping system or the relevant planning scheme.	No: Proceed to question 4c.  An excerpt from the SPP interactive mapping system or the relevant planning scheme must be provided and demonstrate that:  a. the stormwater point of discharge is located 50 metres or more from the flood hazard area; or  b. that a flood hazard area does not adjoin a state-controlled transport tunnel or future state-controlled transport tunnel.  Note: The SPP interactive mapping system is available on the department's website.		
	The stormwater point of discharge is the location at which stormwater leaves the subject site.  AND	<b>Yes:</b> Application cannot qualify for the FastTrack5asses and must follow the standard SARA assessment. Please relevant SDAP state codes.		
	c. Will the proposed development alter the existing topography (lay of the land) of the subject site resulting in stormwater flowing towards a state-controlled transport tunnel or future state-controlled transport tunnel?	No: Application is eligible for FastTrack5 assessment. A site/layout plan must be provided and include contour lines demonstrating the subject site, pre and post development, slopes away from any state-controlled transport tunnel or a future state-controlled transport tunnel.  Yes: Application cannot qualify for the FastTrack5 asset and must follow the standard SARA assessment. Please relevant SDAP state codes.		
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## FastTrack5 qualifying criteria checklist 4

Tidal works – impacts on maritime safety (operational works) (SDAP version 2.2 dated 9 March 2018)

This form must be used when seeking a FastTrack5 assessment pathway for trigger:

1. schedule 10, part 17, division 3, table 2 (operational work in tidal waters)

When submitting an application containing a FastTrack5 trigger to SARA using MyDAS2, applicants must upload a completed qualifying criteria checklist for each eligible trigger. The responses on the form must demonstrate that the triggered aspect of development meets all qualifying criteria applicable to the relevant eligible trigger.

Applicants should also provide or make reference to any supporting information or material that supports their claim for a FastTrack5 assessment.

When seeking FastTrack5 assessment for eligible triggers, you must:

- 1. have completed any other forms relevant to your application
- 2. upload a completed copy of this form when referring your application using MyDAS2
- 3. provide all supporting information required on the form at the time of lodgement this information will assist SARA in undertaking its FastTrack5 assessment.

All terms used in this form have the meaning given in the Act or the regulation.

Qualifying criteria		Response		Supporting information
Tic	lal works			provided
1	Is the proposed tidal works for one or more of the following uses:  a. private single vessel pontoon b. private single vessel jetty c. private single vessel boat ramp d. drainage outlet e. stormwater outlet f. a revetment wall relating to tidal	Yes: Proceed to question 2.  No: Application cannot qualify for the FastTrack5 assemust follow the standard SARA assessment. Please r SDAP state codes.		
2	works listed in (a) to (e).  Will the proposed tidal works, including any structures and any vessel berthed, moored or attached to the structure:  a. encroach into, pass over or under a navigation corridor; or b. be located in a high risk maritime development zone.	No: Application is eligible for FastTrack5 assessment. A site/layout plan must be provided demonstrating that tidal works, including any structures and any vessel berthed at a structure: a. do not encroach into, pass over or under a navigation corridor; or b. are not located in a high risk maritime development zone.  Yes: Application cannot qualify for the FastTrack5 ass	ses	sment pathway and
		must follow the standard SARA assessment. Please r SDAP state codes.		

### **Glossary of terms**

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The DA mapping system is available on the department's website.

**High risk maritime development zone** means areas indicated in the **DA mapping system** as high risk maritime development zone. These are areas in the vicinity of ports, state boat harbours, marinas and navigationally difficult areas such as waterways which experience significant shoaling and waters between and around populated islands. High risk maritime development zone includes:

- 1. marinas with six or more boats
- 2. state boat harbours
- 3. port limits and/or pilotage areas
- 4. sensitive marine environments including areas of constant sand movement
- 5. from the coast to the extent of Queensland waters (three nautical miles).

**Navigation corridor** means areas indicated in the **DA mapping system** as navigation corridor. These are the sections of a navigable tidal waterway allocated for the movement of **vessels**.

#### Private single vessel pontoon is:

- 1. constructed to provide private access to private land from tidal water for non-commercial purposes, and
- 2. designed for a single on-water **vessel** to be attached to the pontoon while it remains on the water (this includes a jetty with up to four associated ancillary mooring such as a dry berth or a personal watercraft pod).

#### Private single vessel jetty is:

- 1. constructed to provide private access to private land from tidal water for non-commercial purposes, and
- 2. designed for a single on-water **vessel** to be attached to the jetty while it remains on the water (this includes a jetty with up to four associated ancillary mooring such as a dry berth or a personal watercraft pod).

**Private single vessel boat ramp** is a boat ramp constructed to provide private access to private land from tidal water for non-commercial purposes.

**Revetment wall** means a protective covering on an embankment of earth designed to maintain the slope or to protect it from erosion.

Vessel means a ship defined under section 10 of the Transport Operations (Marine Safety) Act 1994.

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# FastTrack5 qualifying criteria checklist 5

#### Tidal works - coastal protection (operational work)

(SDAP version 2.2 dated 9 March 2018)

This form must be used when seeking a FastTrack5 assessment pathway for the following trigger:

1. schedule 10, part 17, division 3, table 1 (operational works in tidal waters)

For this checklist, either table 1 or table 2 must be completed, as relevant.

When submitting an application containing a FastTrack5 trigger to SARA using MyDAS2, applicants must upload a completed qualifying criteria checklist for each eligible trigger. The responses on the form must demonstrate that the triggered aspect of development meets all qualifying criteria applicable to the relevant eligible trigger.

Applicants should also provide or make reference to any supporting information or material that supports their claim for a FastTrack5 assessment.

When seeking FastTrack5 assessment for eligible triggers, you must:

- 1. have completed any other forms relevant to your application
- 2. upload a completed copy of this form when referring your application using MyDAS2
- 3. provide all supporting information required on the form at the time of lodgement this information will assist SARA in undertaking its FastTrack5 assessment.

Where not defined, all terms used in this form have the meaning given in the Act or the regulation.

**Table 1: Marinas or state boat harbours** 

Qualifying criteria		Response	Supporting information provided
1	Is the proposed tidal works:  a. for a marine access purpose b. located within a developed marina or state boat harbour area.	Yes: Proceed to question 2.  An excerpt from the DA mapping system must be provided and demonstrate the subject site is located within a mapped developed marina or state boat harbour area.	
		<b>No:</b> Application cannot qualify for the FastTrack5 asses and must follow the standard SARA assessment. Pleas relevant SDAP state codes.	1 /
2	Is the proposed tidal works located within an existing lease issued under the <i>Land Act 1994</i> and supported by owner's consent from:	Yes: Proceed to question 3. A copy of lease under the Land Act 1994 and owner's consent from either DNRME or DTMR, as appropriate, must be provided.	
	a. if the works are in a state boat harbour, the Department of Transport and Main Roads (DTMR); or	<b>No:</b> Application cannot qualify for the FastTrack5 asses and must follow the standard SARA assessment. Pleas relevant SDAP state codes.	
	b. otherwise, the Department of Natural Resources, Mines and Energy (DNRME).		
3	Has the design of the tidal works been certified by a Registered Professional Engineer of Queensland (RPEQ) as complying with the	Yes: Application is eligible for FastTrack5 assessment. Plans certified by an RPEQ must be provided.	
	relevant standards?  Note: Tidal works must be designed in accordance with all appropriate Australian Standards, and the Prescribed Tidal Works Code contained in a regulation	No: Application cannot qualify for the FastTrack5 assessment pathway and must follow the standard SARA assessment. Please refer to the relevant SDAP state codes.	

Qualifying criteria	Response	Supporting information provided
declared under the Coastal Protection and Management Act 1995.		

	le 2: Private marine access struct	ures		
Qu	alifying criteria	Response		Supporting information provided
1	Is the proposed tidal works:  a. private marine development which is a: i. pontoon; or ii. jetty less than 3 metres in width; or iii. boat ramp; and b. not a roofed structure; and c. located within a developed tidal	Yes: Proceed to question 2. An excerpt from the DA mapping system must be provided and demonstrate the subject site is located within an area mapped as a developed tidal waterway area.  No: Application cannot qualify for the FastTrack5 must follow the standard SARA assessment. Plea SDAP state codes.		sment pathway and
2	waterway area. Will the proposed tidal works attach	Yes: Proceed to question 3.		
	to adjoining, privately owned, freehold land, and is this land included in the application?  Note: To comply with qualifying criteria, the tidal works cannot extend across state	Proposal plans must be supplied showing the land to which the tidal works will attach.  No: Application cannot qualify for the FastTrack5 must follow the standard SARA assessment. Plea SDAP state codes.		
	land that is situated above high water			
3	mark (e.g. an esplanade or reserve).  Are there any existing structures or works seaward of the tidal boundary of the land?	No: Proceed to question 4.  Proposal plans must be supplied identifying the tie and demonstrating that no existing structures or walls, jetties or reclamation works, are seaward of	orks, s	such as revetment
		<b>Yes:</b> Application cannot qualify for the FastTrack5 and must follow the standard SARA assessment. relevant SDAP state codes.	asses	sment pathway
4	Is the proposed tidal works either:  a. located within a water allocation area approved for the works by the Gold Coast	Yes: Proceed to question 5. Proposal plans must be supplied showing the location of the tidal works as per either 3a or 3b.		
	b. where a water allocation area has not been set, located within an area: i. set back at least 1.5 metres from the extended side boundaries of the adjoining privately owned land; and ii. not seaward of a quayline; or iii. not within a navigation corridor.	No: Application cannot qualify for the FastTrack5 must follow the standard SARA assessment. Plea SDAP state codes.		
	Note: Plans showing water allocation areas can be obtained from the Gold Coast Waterway Authority.			
5	Has the design of the tidal works been certified by a Registered Professional Engineer of Queensland (RPEQ) as complying with the relevant standards?	Yes: Application is eligible for FastTrack5 assessment. Plans certified by an RPEQ must be provided.  No: Application cannot qualify for the FastTrack5 must follow the standard SARA assessment. Plea		
	Note: Tidal works must be designed in accordance with all appropriate Australian Standards, and the Prescribed Tidal Works Code contained in the Coastal	SDAP state codes.	ise tele	o the relevant

Qualifying criteria	Supporting information provided
Protection and Management Regulation 2003.	

### **Glossary of terms**

**DA mapping system** means the mapping system containing the Geographic Information System mapping layers kept, prepared or sourced by the state that relate to development assessment and matters of interest to the state in assessing development applications.

Note: The **DA mapping system** is available on the department's website.

**Developed marina or state boat harbour area** means areas indicated in the **DA mapping system** as developed marinas or state boat harbours. These are existing facilities that have been developed for the purpose of the safe mooring of vessels.

**Developed tidal waterway area** means areas indicated in the **DA mapping system** as a developed tidal waterway area. These are natural tidal waterways that have a high number of private marine access structures.

Note: A developed tidal waterway area is distinct from a water allocation area. However, an area mapped as a developed tidal waterway area may include a water allocation area.

**Extended side boundaries** of a lot adjacent or connected to prescribed tidal work, means the projection of the side boundary of the lot over tidal water:

- 1. in a continuing straight line; or
- 2. if extending the side boundary into tidal water in a continuing straight line would reduce the width of access to a **navigable waterway** from any adjoining lot to less than three metres, or cause a significant adverse effect to navigational safety, at an angle that ensures:
  - a. the width is not reduced to less than 3 metres; and
  - b. no significant adverse effect is caused to navigational safety.

**Marine access purpose** means a structure in tidal water used to facilitate vessel access for people between land and a **navigable waterway**. This includes jetties, pontoons and boat ramps but excludes decks and boardwalks.

**Navigable waterway** means waters with sufficient depth and width to allow safe passage by all vessel sizes and types that frequently use the area. This includes areas seaward of a **quayline** or **navigation corridor** determined by a managing authority.

**Navigation corridor** means areas indicated in the **DA mapping system** as navigation corridor. These are the sections of a navigable tidal waterway allocated for the movement of vessels.

**Private marine development** means a work for a non-commercial purpose attached to private land and extending over abutting tidal water.

**Quayline** means a boundary set by a managing authority for the waterway that defines how far tidal works, such as pontoons or jetties, may extend into a waterway.

**Tidal boundary** means the legal property boundary adjoining the tidal area, as defined in the *Survey and Mapping Infrastructure Act 2003*.

**Water allocation area** means the area of a waterway defined or endorsed by a managing authority for the waterway where a waterfront property owner may apply for approval to locate and construct a marine access structure.

Note: A managing authority for a **water allocation area** may include Gold Coast Waterways Authority or Department of Transport and Main Roads. A **water allocation area** is distinct from a **developed tidal waterway area**. However, an area mapped as a **developed tidal waterway area** may include a **water allocation area**.

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